

Gloucestershire County Council

25TH OCTOBER, 1933.

---

ANNUAL REPORT  
OF  
The Medical Officer of Health  
FOR THE  
ADMINISTRATIVE COUNTY OF GLOUCESTER  
FOR 1932.

---

SHIRE HALL, GLOUCESTER  
1ST SEPTEMBER, 1933.



Gloucestershire County Council

25TH OCTOBER, 1933.

---

ANNUAL REPORT

OF

The Medical Officer of Health

FOR THE

ADMINISTRATIVE COUNTY OF GLOUCESTER

FOR 1932.

---

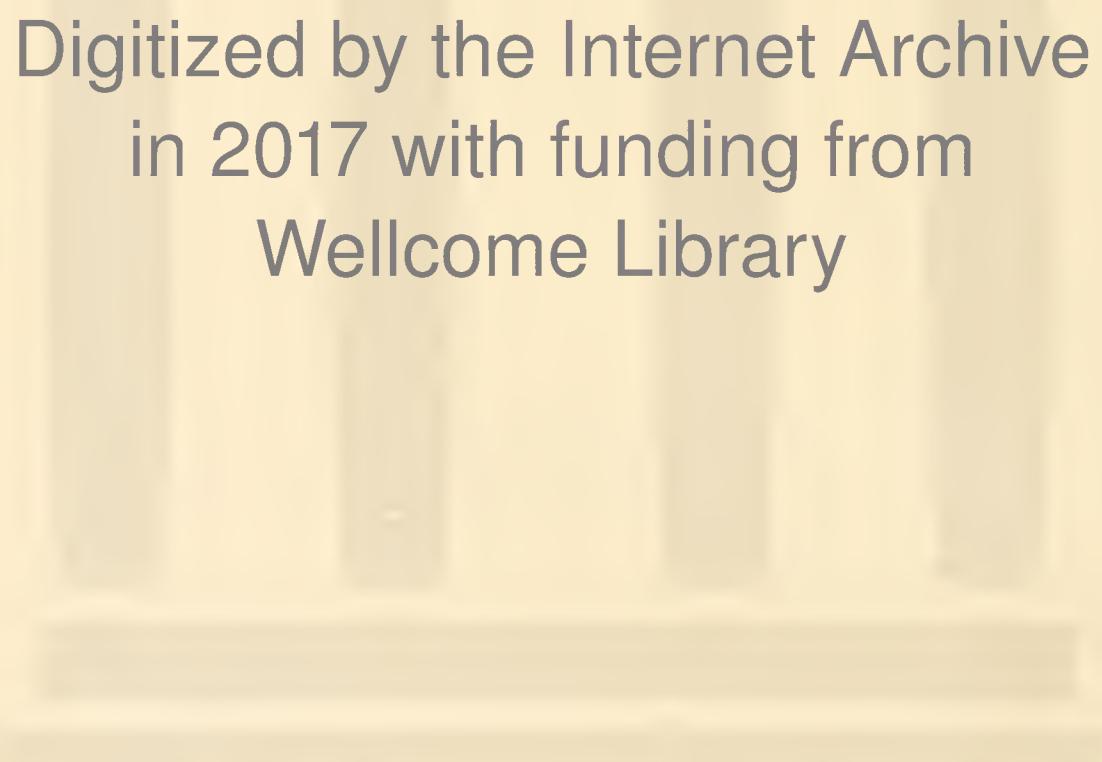
SHIRE HALL, GLOUCESTER

1ST SEPTEMBER, 1933.



## INDEX.

	<i>Page</i>
Arrangement of County Districts . . . . .	9
Bacteriological and Pathological Work . . . . .	40
Bacteriological Examination of Milk and Survey of Dairy Cattle . . . . .	49, 50, 51
Cost of Public Health Services . . . . .	54
Disposal of House Refuse . . . . .	46
Examination of Foods and Drugs . . . . .	47
Health Staff . . . . .	10
Housing . . . . .	41
Infectious Diseases . . . . .	34
Isolation Hospitals . . . . .	41
Local Government Act, 1929 . . . . .	56
Maternity and Child Welfare . . . . .	14
Mental Deficiency . . . . .	51
Orthopaedic Treatment . . . . .	31
Registration of Births, Deaths and Marriages . . . . .	53
Scheme for the Extension of Medical Services . . . . .	29
Sewerage and Sewage Disposal . . . . .	44
Survey of Rivers . . . . .	45
Tables of Statistics . . . . .	End of Report
Vaccination . . . . .	53
Vital Statistics . . . . .	10
Welfare of the Blind . . . . .	26
Water Supply. . . . .	43



Digitized by the Internet Archive  
in 2017 with funding from  
Wellcome Library

<https://archive.org/details/b29260061>

# Gloucestershire County Council

---

## ANNUAL REPORT, 1932

---

HEALTH DEPARTMENT,

SHIRE HALL,

GLoucester,

15th September, 1933.

*To the Chairman and Members of the  
Public Health and Housing Committee.*

LADIES AND GENTLEMEN,

I beg to present herewith my 31st Annual Report on the health services of the County.

The statistics present only minor variations but mention may be made of the fact that, with the birth rates falling more rapidly than the death rate, the time at which they will approximate seems to be close at hand and the County will have a decreasing population.

Interesting features with respect to the housing of the population are brought out in the report on the Census which was taken on 26th/27th, April, 1931. Owing to variations in the boundaries of several constituent districts it is not possible to make complete comparisons. Some are given on pages 11 and 42 but there is other information for the individual districts which should be useful to the respective housing authorities. So far as the figures go, there is evidence of considerable improvement in housing conditions, but as the Registrar-General points out "it is doubtful whether the numerical reduction has been accompanied by an equivalent improvement in actual housing conditions."

Again, the County was relatively immune from infectious disease of a serious character.

In the late summer of 1932 a complete survey, extending over many weeks, of all the health services was made by officials of the Ministry of Health for the purposes of the Local Government Act, 1929. The observations of

the Minister on the report of the survey to him were received in June 1933. His general conclusion is that "the Council are maintaining a reasonable "standard of efficiency and progress in the discharge of their functions" and he expresses appreciation of the continuing development of the Scheme for the extension of Medical Services in which it appears that co-operation with hospitals and medical practitioners has been achieved in a high degree and with valuable results. He also notes with satisfaction the progress made in the Maternity and Child Welfare Service, as exemplified in the development of ante-natal clinics, the provision of dental services, the establishment of additional Infant Welfare Centres, and the supervision of the pre-school child.

The following pages contain a brief survey of the activities under various services during the year ending 31st December, 1932. The section under the heading of Maternity and Child Welfare was prepared by Dr. E. C. Morris Jones.

I have the honour to remain,

Your obedient servant,

**J. MIDDLETON MARTIN,**

*County Medical Officer of Health.*

**TABLE A, 1932.**  
**Health Staff of District Councils.**

<i>Urban.</i>		<i>Medical Officer of Health.</i>		<i>Sanitary Inspector.</i>
Awre	...	... O. W. Andrews	...	H. E. W. Hook
Charlton Kings	...	... A. Barrett Cardew	...	F. A. Middleton
Cheltenham	...	... D. E. Morley	...	F. R. Jefford
Cirencester	...	... H. F. W. Adams	...	Wentworth Jones
Coleford	...	... <i>See</i> Awre	...	H. Vaughan
Kingswood	...	... C. J. Perrott	...	Ivor A. Stephenson
Mangotsfield	...	... T. Aubrey	...	F. A. Long
Nailsworth	...	... R. Green	...	T. Wood
Newnham	...	... <i>See</i> Awre	...	<i>See</i> Awre
Stow-on-the-Wold	...	... L. R. King	...	P. W. Alcock
Stroud	...	... <i>See</i> Nailsworth	...	W. A. Hudson
Tetbury	...	... <i>See</i> Cirencester	...	G. Hearsey
Tewkesbury	...	... T. H. Holroyd	...	W. Ridler
Westbury-on-Severn	...	... <i>See</i> Awre	...	<i>See</i> Awre
<i>Rural.</i>				
Campden	...	... W. C. C. Easton	...	C. J. Gander
Cheltenham	...	... F. J. Lidderdale	...	E. W. Moore
Chipping Sodbury	...	... T. Rhind	...	{ W. H. Williams H. S. Hale
Cirencester	...	... <i>See</i> Cirencester U.	...	
Dursley	...	... Ditto	...	W. H. Williams
East Dean & United Parishes	<i>See</i> Awre U.		...	A. W. Collinson
Faringdon (part of)	...	... W. Sisam	...	C. C. Sampson
Gloucester	...	... <i>See</i> Awre U.	...	O. M. Hale
Lydney	...	... Ditto	...	{ G. J. Elliott W. M. Richards
Newent	...	... W. M. Lucas Johnstone	...	
Northleach	...	... <i>See</i> Cirencester U.	...	W. Francis
Stow-on-the-Wold	...	... J. E. Jameson	...	G. H. Cowles
Stroud	...	... <i>See</i> Nailsworth U.	...	{ D. E. Whittaker H. Barrett
Tetbury	...	... <i>See</i> Cirencester U.	...	
Tewkesbury (part of)	...	... <i>See</i> Tewkesbury U.	...	E. H. Rosser
Thornbury	...	... <i>See</i> Chipping Sodbury R.	...	F. W. Davies
Warmley	...	... T. Aubrey	...	W. H. Knee
West Dean	...	... O. W. Andrews	...	S. B. J. Davies
Wheatenhurst	...	... <i>See</i> Nailsworth U.	...	L. Y. Whittingham
Winchcombe (part of)	...	... G. R. Cox	...	H. Brown

**TABLE B.**  
**Public Health Officers of County Council.**

County Medical Officer of Health	J. Middleton Martin
Tuberculosis Officers (jointly with City of Gloucester) ... ...	W. Arnott Dickson (also Medical Super- intendent, Tuberculosis Institution), E. D. D. Davies, F. H. Woolley
Maternity and Child Welfare Medi- cal Officer	E. Catherine Morris Jones
Consultant Obstetricians, etc. (part time) ... ... ...	Hospital Staffs—Cheltenham, Gloucester and Bristol Hospitals, and Maternity Homes of Cheltenham and Gloucester District Nursing Associations
Venereal Diseases Officers (part time)	Hospital Staffs :— Cheltenham General Hospital, Gloucestershire Royal Infir- mary, Stroud Hospital
School Medical Inspectors	T. F. H. Blake, Sarah Wilson
Ditto (part time)	H. F. W. Adams, R. Green, T. Rhind.
County Dentists ... ...	Agnes M. Boal, Dorothy W. Crozier, P. J. Wakley, B. F. Wren
Maternity and Child Welfare Centre Medical Officers (Part Time)	44 General Medical Practitioners
Ante-natal Clinic Medical Officers (part time)	6 General Medical Practitioners
Pathologists (part time) ... ...	Bristol—I. Walker Hall ; Cheltenham— J. B. Davey ; Gloucester—E. N. Davey.
Out-Station Medical Officers (part time)	50 General Medical Practitioners 15 Members of Hospital Staffs
Orthopaedic Surgeons (part time)	Ethel M. Redman, J. S. Robinson, J. F. H. Stallman
Public Vaccinators (part time) ...	67 General Medical Practitioners
Veterinary Surgeons (part time)	16 General Veterinary Practitioners
County Analyst ... ... ...	R. H. Ellis, (also City Analyst)
Vaccination Officers (part time) ...	28 Officers
County Health Superintendents (whole time)	A. Boyd, V. M. Bausor, I. V. Ladd, F. E. Lyne, E. Mason, J. I. McLauchlan, D. K. Palin, M. S. Payne.
Orthopaedic Nurses (whole time)	D. A. Rodenhurst, J. Shepherd
Dental Nurses (whole time) ...	M. H. Griffiths (resigned 9/1/33), M. Hunt, A. G. Powell, W. H. Roberts, E. E. Witchell (appointed 9/1/33)
Health Visitors (whole time) (part time) ...	A. Somerfield, P. E. Watkins, L. Wright 134 District Nurses

### ARRANGEMENT OF COUNTY DISTRICTS.

Subsequent to the Order of the Minister of Health under Section 49 of the Local Government Act, 1929, confirmed by Act of Parliament on 27th March, 1931, revising the County Boundary in certain parts, the internal rearrangements of the County Districts came under consideration. The provisional proposals were set out in pages 8 and 9 of the Report for 1931 : after considerable discussion, the grouping there given was confirmed but the constituent districts were modified in certain particulars. The areas and populations of the districts as adopted by the County Council on 25th May 1933 are :—

(CENSUS 1931)

URBAN

	Area.	Population.
Charlton Kings U.D.	3,380	4,760
Cheltenham M.B.	4,929	49,978
Cirencester U.D.	5,686	8,142
Kingswood U.D.	1,530	13,286
Mangotsfield U.D.	1,526	11,411
Nailsworth U.D.	1,598	3,129
Stroud U.D.	1,306	8,425
Tewkesbury U.D.	2,651	4,537
Total U.D.	22,606	103,668

RURAL

Cheltenham R.D.	79,799	15,844
Cirencester R.D.	82,689	12,112
Dursley R.D.	26,640	13,175
East Dean R.D.	36,010	20,962
Gloucester R.D.	61,280	19,311
Lydney R.D.	24,551	10,813
Newent R.D.	45,522	8,341
N. Cotswold R.D.	93,082	16,429
Northleach R.D.	74,952	7,658
Sodbury R.D.	68,683	23,848
Stroud R.D.	36,513	27,309
Tetbury R.D.	31,781	5,857
Thornbury R.D.	61,360	18,063
Warmley R.D.	8,850	9,000
West Dean R.D.	24,199	18,552
Total R.D.	755,911	227,274
	778,517	330,942

These proposals have been submitted to the Minister of Health. On the assumption that the grouping in its main features will be accepted, schemes under section 58 (appointments of Medical Officers of Health) and under Section 63 (Isolation Hospitals) have been drafted. In respect of the former, the reduction in the number of district councils will economise the time of the Medical Officers of Health spent in attending meetings, and from that point of view the number might have been reduced even further with advantage.

## HEALTH STAFF.

The list of persons undertaking health duties on behalf of the County Council is set out in the two tables, on pages 7 and 8.

### MEDICAL OFFICERS OF HEALTH.

No changes in the appointments of Medical Officers of Health occurred during 1932 but, as mentioned, in the last report, West Dean R.D. came automatically into the West Gloucestershire United District on Dr. Buchanan's resignation as from 31st December 1931.

### SANITARY INSPECTORS.

There were three changes among the Sanitary Inspectors. Mr. A. T. Silvey succeeded Mr. E. J. Matthews who had held office in the Cirencester R.D. for 22 years; Mr. P. Phipps resigned his appointment in the West Dean R.D. after nearly 27 years service, on 31st December, 1931, and has been succeeded by Mr. S. B. J. Davies, and Mr. Lewis who had held office in the Stow-on-the-Wold R.D. for about a year has been followed by Mr. G. H. Cowles.

## VITAL STATISTICS.

### POPULATION.

The Gloucestershire volume of the Census (1931) Report was issued in the Spring of 1933. Various changes in the County boundaries were made in the first thirty years of the present century but, taking comparable areas, the increases in the population of the County were 2.4, .1 and 2.3 per cent. in the three decennia. Between 1921 and 1931 the increase in the country at large was 10.9 per cent.

A novel feature in the recent census was a return of the "usual residence" of each individual. As an example, for children in boarding schools, the school address was taken as the usual residence; as the census figures were obtained during the school holidays the enumerated population in Cheltenham M.B. was increased for the absent children and staff by 2,193 and decreased for non-residents enumerated in Cheltenham by 1186: the enumerated population was therefore increased by 1007 (the difference between these two figures) or 20 per 1000. The same procedure resulted in decreases on the enumerated population in 24 districts, but for the County as a whole, there was a balance of 211 residents enumerated elsewhere.

The population of the administrative County, after the revision of the County Boundary, was 336,051. The loss by emigration was 22,803 or 6.85 per cent. between 1901 and 1911, 16,400 or 5 per

cent. between 1911 and 1921 and 5,491 or 1.7 per cent. between 1921 and 1931. In the following table is compared the census population since 1901 :

		1901	1911	1921	1931
13 Urban Districts...	...	100,404	100,419	99,275	100,618 <i>a</i>
22 Rural	...	221,038	228,545	230,071	235,433 <i>b</i>
Administrative County...	321,442	328,964	329,346	336,051	

*a* Excluding Mangotsfield U.D.      *b* Including Mangotsfield U.D.

As in the previous decennium the population of most of the urban districts decreased, but in the aggregate there was a gain of about 1400 (excluding Mangotsfield) compared with a loss in the earlier period of about 1200. In eight of the Rural Districts comparisons are impracticable owing to changes in their areas : of the remaining 14, 9 show increases, ranging from 1.7 per cent. in the Cirencester R.D. to 16 per cent. in Chipping Sodbury R.D. The largest decreases occurred in the Stroud and Northleach R.D.—about  $4\frac{1}{2}$  per cent. each. The areas showing increases are chiefly those on the borders of the large towns Bristol, Cheltenham and Gloucester, but Lydney R.D. has increased fairly steadily from 7,507 in 1881 to 10,820 in 1931.

In the ancient County of Gloucester at each census since 1801, females have exceeded males : in the first half of that century, the excess was in the proportion of 100 to 110. In the next fifty years the disproportion increased to about 100 males to 115 females ; the census of 1931 shows a tendency to equalisation, the proportion being 100 males to 112.5 females. The differences in the Administrative County are rather less, being 100 males to 110 females in 1931 : the greatest disproportion is in Cheltenham where the corresponding figure for females is 138. In five Rural districts males are in excess, namely Northleach, Thornbury, East Dean, West Dean and Lydney ; in the last there are only 85 females for each 100 males.

The most interesting information yielded by the census is probably that relating to the conditions of housing : the general conclusion of the Registrar-General is “ It might be inferred that, “since the over-all average person per room density has been reduced, “ the Gloucestershire population is on the whole better housed than “ it was in 1921,” but later he says “ it is doubtful whether the “ numerical reduction has been accompanied by an equivalent im-“ provement in actual housing conditions.” In this connection, he refers to the effect of the size of families and to the transfer of population from the larger to the smaller families. The average room density for the County is .77 persons per room. “ The areas

exhibiting the worst conditions are West Dean R.D. with the highest average of .92 persons per room, followed by East Dean R.D. (.86) and Kingswood U.D. (.85). The areas showing the most favourable densities are Faringdon R.D. (.63), Cheltenham R.D. and Tewkesbury R.D. (.64 each). It is worthy of note that, compared with 1921, the density figure shows an improvement in every area . . . largely a consequence of the reductions in the size of families." The fall in the size of families between 1921 and 1931 is given as from 3.97 to 3.63.

Other information on housing conditions given in the Census Report is used in the Section dealing with Housing on a later page.

#### BIRTHS.

The number of births registered during 1932 was the lowest in any year, not excluding the exceptional war year 1917 (4,786) being 4,732 : since 1920 the number has fallen fairly steadily from 7,658. The declining rate is seen in the following table :—

	1932	1931	1926-1930	1921-1925	1916-1920	1911-1915	1906-1910	1901-1905
Urban ... ...	12.7	12.9	13.5	16.7	16.7	18.1	20.8	22.3
Rural ... ...	14.7	15.4	15.7	18.4	17.9	19.8	22.4	24.6
Administrative County ...	14.0	14.6	15.0	17.9	17.6	19.3	21.8	23.8
England & Wales	15.3	15.8	16.7	19.9	20.1	23.6	26.3	28.2

In the last report attention was directed to the gradual approximation of the birth rate to the death rate, the fall in the former being greater than in the latter. The figures for the present century are :—

	Birth Rate	Death Rate
1901-5 ...	23.8	14.1
1906-10 ...	21.8	13.3
1911-15 ...	19.3	13.4
1916-20 ...	17.6	14.4
1921-25 ...	12.9	12.4
1926-30 ...	15.0	12.6
1931 ...	14.6	13.2
1932 ...	14.0	13.0

Whereas in the quinquennium 1901-5 the natural increase of population (difference between birth rate and death rate) was 9.7 per 1000 of the population, by 1932 the difference was reduced to 1

per 1000. At this rate it would appear that before long the County will have a decreasing population.

#### DEATHS.

The number of deaths during the year was 4,378, a slight decrease of 46 on that in 1931. The lowest record, when the population was 6,000 less than in 1932 was 3,879 in 1923. The general trend of the death rate is shown in the following table :

	1932	1931	1926-1930	1921-1925	1916-1920	1911-1915	1906-1910	1901-1905
Urban ... ...	13.7	14.2	13.2	13.6	15.1	14.2	14.1	14.6
Rural ... ...	12.6	12.6	12.3	11.9	14.1	13.0	12.9	13.8
Administrative County ...	13.0	13.2	12.6	12.4	14.4	13.4	13.3	14.1
England & Wales	12.0	12.3	10.3	10.9	13.4	13.7	14.4	16.0

The comparatively large rise in 1916-20 was due mainly to the widespread epidemic of influenza in 1918 to which 849 deaths (18 per cent. of total deaths) were attributed.

Interesting information as to the incidence of the deaths in age-groups is given in the following statement :—

#### PERCENTAGE OF THE TOTAL DEATHS IN AGE GROUPS.

##### Under

##### one year

		1-5	5-15	5-25	25-65	65 & over	
1901-10	... ...	15.0	6.0	3.1	29.3	42.6	
11-20	... ...	10.2	4.4	3.5	31.8	45.8	
21-30	... ...	7.2	2.7	2.3	30.8	53.5	
1931	... ...	6.1	2.1	1.5	30.2	56.7	
1932	... ...	5.5	1.7	1.5	3.2	29.0	59.1

From this it will be seen that while in 1901-10 28 per cent. of deaths occurred at ages below 25 years, the proportion in 1921-30 was less than 16 per cent. The only age-group showing a persistent increase is that of 65 years and upward. To whatever cause or causes the decreases, except at ages above 65 years, are due—improved conditions of living generally—the fact remains that death must supervene at some time, and with the prolongation of life, with such conditions as bronchitis, pneumonia and tuberculosis becoming less fatal among the younger members of the population, the importance of diseases of older age becomes greater. Thus whereas the three diseases just mentioned claim only about 60 lives compared with 100 at the beginning of the century, the toll of

cancer and heart diseases was about 160. The greatest opportunities for prevention would seem, therefore, to be transferred to these conditions and medical research is now directed largely in those directions. With respect to cancer, electrical treatment, whether by radium or electrical machinery, offers considerable possibilities : in this County a few cases have been treated on behalf of the County Council at the Bristol Royal Infirmary and the large general hospitals at Cheltenham and Gloucester are also developing this form of treatment.

#### INFANTILE MORTALITY.

The number of deaths of infants under the age of one year reached another low record in 1932 being only 239, less than one-third the figure at the commencement of the century. The death rate per 1000 births has fallen fairly steadily as is shown in the following summary :—

	1932	1931	1926-1930	1921-1925	1916-1920	1911-1915	1906-1910	1901-1905
Urban	60	55	58	68	69	87	95.5	111
Rural	46	54.5	52	53	66	77	75	92.5
Administrative								
County	50.5	55	54	55	67	80	81	98
England & Wales	65	66	68	76	90	110	117	138

It is suggested from time to time that the reduction set out above results in the survival of weakly persons of little benefit to the community. This is not borne out by the table given in the last paragraph from which it would appear that the additional children reaching their first birthday survive in increasing numbers to reach mature years.

#### MATERNITY AND CHILD WELFARE.

##### 1. NOTIFICATION OF BIRTHS.

The proportion of births notified within 36 hours of their occurrence is 87.3 per cent. There were 4,295 births registered and 3,749 notified—of which 3,149 (83.9 per cent.) were notified by midwives and maternity nurses and 600 (16.1 per cent.) by doctors and parents.

##### 2. HEALTH VISITING.

The following summary shows the number of visits paid during the year by all health visitors :—

	First Visits.	Total Visits.
(a) To Expectant Mothers	1,873	13,839
(b) To children under 1 year	3,980	25,543
(c) To children between 1-5 years —		50,513
<b>TOTAL</b>	<b>5,853</b>	<b>89,895</b>

This is a very large increase in the total visits and shows an increase on last year's work of over 3,000 visits to the children over 1 year. The health visitors have been giving special attention to these children and it is satisfactory to see that so many more visits have been made. There appears to be an increasing interest taken in health visiting and its value is becoming much more recognised, both by nurses and parents.

### 3. MEASLES VISITING.

During the year the district nurses have visited and nursed 174 cases of measles on behalf of the Council. This number is a large reduction on the previous year.

#### 4. INFANT PROTECTION VISITING.

This work, under the Children Act 1908, part 1, which was transferred to the County Council in 1930, continued steadily to increase. The foster mothers are visited regularly and, except in a few instances, are grateful for the help which is given. On the whole the standard of the house and foster mother is good and no proceedings were taken during the year.

Number of foster parents on the register in Jan. 1932	113
" " " " " " " " Dec. 1932	135

12 foster parents gave up their charges and 35 new persons were registered.

Number of children on the register in Jan. 1932 139  
 " " " " " " Dec. 1932 163

32 children were moved to other places and 56 new children were registered.

Under the Children and Young Persons Act, 1932, part V., which came into operation on January 1st, 1933, the age of the child under supervision has been raised from 7 years to 9 years. This has resulted in 19 children being put back on the register who had been taken off when they reached 7 years of age.

Under Section 69 (1) and (2) private boarding schools taking children under 9 years of age are not now exempt from giving notice. The Council under Section 2 (4) of the principal Act may exempt such schools from visitation if in their opinion the conditions are

satisfactory. Public notices have been displayed on police notice boards and at Infant Welfare Centres and notice also has been given in the public press. A circular setting out the new provisions of the Act was sent to all foster parents on the register.

### 5. ADMISSIONS TO HOSPITAL.

#### *Maternity Cases.*

There is a constant demand for admission to hospital for some cause associated with pregnancy or confinement. Cases of anticipated difficulty or illness referred from the ante-natal centres and cases of emergency reported by the doctors called in by the midwives are admitted to the nearest hospital as soon as necessary. A large number of persons made application for admission on the grounds of unsuitable home conditions and these were carefully considered on their merits by the Sub Committee.

During the year 164 applications and recommendations were approved—11 of these patients were subsequently confined in their own homes, 9 cases were not admitted until 1933 and 3 cases which had been approved in 1932 were admitted for confinement, making a total of 147 admissions.

		Confinements	Puerperal Pyrexia or Puerperal Fever	Total.
1924	...	9	—	9
1925	...	18	—	18
1926	...	46	—	46
1927	...	52	6	58
1928	...	60	7	67
1929	...	126	20	146
1930	...	131	18	149
1931	...	165	15	180
1932	...	133	14	147

#### CAUSES NECESSITATING ADMISSION :

##### OBSTETRIC.

Contracted pelvis	...	...	18
Abnormal presentation	...	...	15
Toxaemia	...	...	31
Difficult labour	...	...	16
Other anticipated difficulty	...	...	10
			90

##### MEDICAL

Heart disease	...	...	5
Nervous disease	...	...	5
Other conditions	...	...	8
			18

##### HOME CONDITIONS

##### PUERPERAL PYREXIA

...	...	...	25
...	...	...	14
			147

### *Infants and Young Children.*

There is a certain number of cases of rickets and marasmus occurring in young children but very few of these appear to be given the advantage of treatment in hospital in the early stages. The parents frequently will not consent to allow their children to go to hospital as they do not want to part from them and as the period of treatment may be prolonged this is understandable, but the advantage of such a course is seen by the results. The total number recommended for such treatment this year was very small though the number of children sent in on account of discharging eyes was larger than usual. In many of the latter cases the mothers were also admitted so that the advantages of breast feeding might be continued.

		Rickets, etc.	Ophthalmia Neonatorum
1928	...	...	7
1929	...	...	20
1930	...	...	17
1931	...	...	17
1932	...	...	9

### 6. CONSULTANT OPINIONS.

All general practitioners in the County have been informed that the services of consultants are available for maternity patients in suitable instances. Notice of requiring such assistance must be given beforehand at the Health Office when immediate arrangements are made for the consultant to meet the doctor in charge of the case.

		Puerperal Pyrexia	Confinements
1927	...	...	8
1928	...	...	10
1929	...	...	11
1930	...	...	8
1931	...	...	7
1932	...	...	3

### 7. ASSISTED MILK SUPPLIES.

The number of persons making applications for free milk continues to increase, especially in the Forest of Dean where so many colliers are on part-time work. Careful enquiry is made into every case before authority is given for the supply and a visit is paid by the health visitor before an extension is authorised at the end of each 4 weeks. The supply is stopped when the condition of the child or mother no longer justifies the grant of milk or when it is doubtful whether the milk is being taken by the individual for whom it was intended. Most of the children living under present conditions would benefit from a daily supply of milk, but after the

first period of six months a certificate is required from a doctor that continued milk grant is essential on account of the child's subnormal condition.

	1929	1930	1931	1932
Number of new applications	433	489	596	602
Number of renewals ...	1,886	3,233	4,427	3,583

## 8. NURSING HOMES REGISTRATION ACT, 1927.

There were 20 registered homes under supervision at the beginning of the year. Applications have been received during the year for registration of 4 new homes—one for maternity cases only and three for the reception of maternity and general medical cases. The premises in all cases were satisfactory and all the applications were approved. Periodic visits are paid to the registered homes. No homes have been taken off the register so there were 24 approved at the end of December.

## 9. MATERNITY AND CHILD WELFARE CENTRES.

### *Pre-natal Centres.*

When arrangements were commenced to form a series of these centres in the county it was hoped to be able to open a new centre every three months until a reasonable number were available for mothers in all districts. The Committee have regretfully been obliged to limit the expenditure on this section of the work and no new centre was opened actually during 1932, Berkeley being started in October, 1931, and Tewkesbury in March 1933.

The attendances are keeping at a steady level and much interest is shown by the midwives in attending with their patients. The attendances for examination after confinement are not very good—the patients not yet realising that this may prevent later illness and is an important part of the work.

The following table gives the records of *all* centres during 1932.

Number of new patients	first baby	...	69
	Other	...	132
	post-natal	...	32
Number of old patients	...	...	53
		—	286
Number of attendances : pre-natal cases		367	
post „ „ „	76		
		—	443
Number of sessions at all centres		48	
Average attendance per session	...	...	9.2

Chief abnormalities found at the centres :—

				Cases.
Oral sepsis	...	...	...	69
Varicose veins	...	...	...	21
Contracted pelvis	...	...	...	11
Toxaemia	...	...	...	10
Heart disease	...	...	...	10

In addition ante-natal work is carried out at 3 of the voluntary Infant Welfare Centres where 26 patients were seen and also at the Municipal Clinics in Bristol, Cheltenham and Gloucester, where 42 patients were seen during the year.

#### *Child Welfare Centres.*

The Maternity and Child Welfare Committee were unable to make any grant during the year to new centres but in spite of difficulties they were glad to report that a centre was opened in Mitcheldean in May, 1932. Sufficient money was collected to enable the local Committee to feel justified in starting: much of the equipment was given and the doctor volunteered his services for a year. The work of the centres has been maintained at a high level and the interest displayed by the members of the voluntary Committees is unabating. The inauguration of a plan of providing lecturers for a series of talks to the centres by the County Federation has proved very successful and has improved the educational work of the centres.

Total number of attendances at all centres.

(a) by children under 1 year	11,546
(b) by children over 1 year ...	15,042
Average attendance per session ...	26.8

#### 10. DENTAL TREATMENT FOR EXPECTANT AND NURSING MOTHERS AND CHILDREN UNDER 5.

The arrangements made to provide dental treatment for necessary cases coming within certain groups were completed in 1931 and during the year the work has proceeded. Dental clinics were established at the out-stations at Chipping Campden, Coleford, Soundwell and Hambrook, and the hospital premises used by arrangement at Stroud. The dental surgeons hold sessions on definite days each month: eligible cases are referred by the district nurses or private doctors, from the Maternity and Child Welfare Centres and large numbers of patients requiring treatment are found by the dentists in their periodical visits to centres. School children

requiring more treatment than can be conveniently given on School premises are also treated at the Clinics. The response has been quite satisfactory but as the arrangements are new to all concerned it will take some little time before the work is established satisfactorily. However, there have been many indications during the year that the service is appreciated and that mothers are quite ready to take advantage of it.

The following summary refers to the work done during 1932 at all the dental centres.

Number of new cases :				
Mothers	...	...	...	117
Children under 5	...	...	...	47
Children of School-age	...	...	...	12
				176
Number of attendances				
by mothers	...	...	...	269
Children under 5	...	...	...	52
Children of School age	...	...	...	12
				333
Number of anaesthetics :				
General	...	...	...	180
Local	...	...	...	48

## 11. EDUCATIONAL WORK.

### (a) Travelling Health Exhibition.

The Exhibition made two tours again during the year, visiting 10 villages in the district of Frampton-on-Severn and Painswick and 9 villages round Staunton and Tewkesbury. 81 villages have now been visited and reports are frequently received which show that the visit has been remembered and the lessons put into practice. The arrangements have been much improved. The success of the tour largely depends on the amount of personal preliminary work done in the villages. This takes up a great deal of time and is a tax on certain of the voluntary workers and the Exhibition Committee feel that the time has now come when a definite person should be appointed as organiser of the tours so that this load may be lifted off their shoulders. The Committee are very satisfied with the interest shown in the Exhibition by the people of the villages.

### (b) Lectures and Addresses.

During the year 23 talks were given by the Maternity and Child Welfare Medical Officer—these were mainly to meetings of women's institutes but also included district nursing associations, infant welfare annual meetings and adult schools. The chief subjects are the measures taken to preserve the health of mothers and children and simple lessons in general health.

## 12. ADMINISTRATIONS OF THE MIDWIVES ACTS.

*Provision of Midwifery Services.*

The position at the end of December, 1932 was as under.

## Number of practising midwives :—

Trained (a) working for associations	...	...	184
(b) private	...	...	51
Untrained—private	...	...	9

## Number of Parishes :—

(a) Covered by District Nurse Midwives	...	...	338
(b) Covered by Independent Midwives	...	...	7
(c) With no Certified Midwife	...	...	4

Number of registered births    ...    ...    ...    ... 4,295

Number of cases attended by Certified Midwives    ...    ... 2,542

Percentage of total births    ...    ...    ... 62

Number of cases requiring medical help    ...    ...    ... 1,267

Percentage of midwives' cases requiring medical help    ...    49.8

Midwifery Services by District Nurses.	No. of D.N.A. Parishes.		Area in Population Acres. 1921.	
(a) Associations affiliated with Glos. C.N.A. ...	128	333	734,739	261,008
(b) Associations affiliated with other C.N.A. ...	3	3	4,029	654
(c) Associations not affiliated	2	3	6,307	720
	133	339	745,075	262,382
Independent Midwives    ...    ...		7	27,049	16,226
No Certified Midwife    ...    ...		4	6,392	1,249
<i>Total Administrative County</i> ...	133	350	778,516	279,857
(Excluding Cheltenham M.B.)				

It is satisfactory to report the formation of a new association including Cranham and Sheepscombe where the need for a trained nurse has been felt for some time.

During the year there has been amalgamation in two areas. The Dumbleton and Beckford Nursing Associations have combined and the Toddington and Stanton Associations. In this way it is possible to employ fully trained nurses in these districts and give them the advantage of easier transport by means of a car.

*King Edward Memorial Fund.*

Nurses maintained from this Fund were used for duty in the County as under :

			Weeks.
Emergency Duty	...	...	54
Holiday duty	...	...	32

In addition, additional nurses were required for emergency duty for 118 weeks.

*Confinements attended by Certified Midwives.*

The number of births registered, excluding Cheltenham, during 1932 was 4,295 ; 3,749 notifications of birth were received, 3,149 being made by midwives who attended 62 per cent. of the total births.

*Notices received under the Rules of the Central Midwives Board.*

	1931	1932
Notification of Intention to practise	275	282
Number of confinements attended by midwives	2,629	2,542
	Number	Percentage
Medical Help : Mother	1052	40.0
Infant	181	6.8
Death :      Mother	2	.1
Infant	22	.8
Still Births	51	1.9
Artificial feeding	30	1.1
	1,338	50.7
Source of Infection	83	—
Laying out of dead body	23	—
Change of address	52	—
	1,360	53.6

In spite of the fact that the total number of confinements was smaller than in 1931 the midwives sent for medical help for a larger number of cases. This fact may be taken as an indication that the midwives are on the whole more on the alert to notice slight departures from the normal and that conditions are now dealt with which were previously left alone or not considered until a more severe complication was present. The Inspectors of Midwives in their visits are persistently drawing attention to the conditions which should be taken note of and at the pre-natal centres the possible difficulties of a case are pointed out to the midwife so that she may be on her guard.

The number of infants who require artificial feeding while the midwife is in attendance is small but unfortunately this figure does not represent the true position as many mothers cease feeding their infants when they get up or because of the advice given by well-meaning but ignorant relatives and neighbours. This subject receives much attention at the Infant Welfare Centres but often the harm is done before the mothers attend the centre for advice.

*Still-births and Early Infant Deaths.*

There were 108 still-births notified during the year and 44 of these occurred in the practices of midwives. Enquiries were made

into each of these cases in an endeavour to find the cause of the death of the foetus. More than half the cases went to full-term and death must have occurred just before or during the labour. In 21 cases definite conditions could be found such as difficult labour, abnormality of the infant, or illness of the mother, but in the remainder of the cases there was no apparent cause for the death of the child before birth.

The enquiry was also continued into certain deaths of infants occurring within 4 weeks of birth. A smaller number was dealt with this year and the figures are inconclusive. The attention of mothers is drawn by the midwives to the importance of their health during pregnancy and to the necessity of regular supervision so that no condition which may adversely affect the child is left unrecognised until labour has commenced.

	Still births	Early Infant Deaths.
(a) Congenital disease or deformity	5	13
(b) Disease of mother during pregnancy	6	7
(c) Difficult labour	10	7
(d) Emergency case	2	—
(e) B.B.A.—no attention at birth	4	—
(f) Disease of infant	—	14
(g) No apparent reason and no stated difficulty	17	14
(f) Overlaying	—	1
(i) Prematurity	—	19
	44	75
	—	—

### *Puerperal Pyrexia.*

Medical help was called in by midwives for 37 cases in which there was rise of temperature. This is a much smaller number than in previous years and may be an indication that some at least of the conditions which tend to lead to such a result are being dealt with beforehand. Enquiries are made by the County Health Superintendent in such cases : in 28 instances the condition was slight and the patient rapidly recovered. Nine cases were subsequently notified under the Puerperal Pyrexia Regulations in addition to 31 cases notified direct by doctors—a total of 40 notifications. 14 patients were admitted to hospital under the County Council Scheme and 6 others by private arrangement. Consultants were asked for at the home in 3 instances. Seven of the patients died in spite of the treatment facilities available.

### *Maternal Deaths.*

The number of maternal deaths during the year has caused considerable concern as 31 mothers lost their lives within 4 weeks of their confinement, 14 of them at the birth of the first baby. This gives a maternal mortality rate of 7.2 which is much above the rate for England and Wales. In some cases there was a previously existing medical condition which was aggravated by the strain of pregnancy and labour, and death was contributed to or accelerated by this disease but in the majority of the cases death was directly due to child bearing. The final report of the Departmental Committee of the Ministry of Health was published in July and several recommendations are made which are receiving consideration from the practical point of view. The Committee advise the Minister that the confidential enquiries at present made into each maternal death should be continued, as such investigations throw light on local conditions of work and may indicate where improvements could be made. As a general rule here the doctor and midwife concerned in each case are interviewed by the Maternity and Child Welfare Medical Officer and a full history of the case obtained. The fullest assistance has been given during the year by doctors and nurses in these enquiries. The summary below is based on the lines of the Departmental Committee's work. The largest series of deaths followed conditions due to toxæmia, which arise during pregnancy and can often be prevented if recognised early and treated immediately. Deaths from these causes should be diminishing. The second largest series was from puerperal sepsis—the bugbear of midwifery—five of the cases having long and difficult labours owing to the condition not having been anticipated.

The final report states that 50 per cent. of maternal deaths are avoidable and can be prevented (a) if due forethought is exercised by the expectant mother and her attendant; (b) if a reasonable degree of skill is brought to bear on the management of the case and (c) if adequate facilities for treatment are provided and utilised. In this county the facilities are available, and the standard of skill of doctors and midwives is at a reasonably high level, but there is still a lack of realisation on the part of the patient and her relatives of the necessity for engaging the attendant early, for submitting to such supervision as may be considered necessary, and for carrying out any treatment which may be ordered thoroughly and well. Nine of the deaths can be directly attributed to the negligence of the patient in failing to book any attendant early and in refusing to comply with the treatment recommended. Education in this respect is carried out wherever possible—at meetings, at pre-natal and infant welfare centres and individually of the full-time officers and midwives.

## Summary of cases :

<i>Number of Maternal Deaths</i>	...	...	...	31
Number of patients delivered :				
(a) by doctor	...	...	...	6
(b) by midwife	...	...	...	3
(c) without an attendant	...	...	...	6
Number of patients (a) delivered in Institutions				
(1) Hospital	...	...	12	
(2) Nursing Home	...	...	2	
(b) died undelivered	...	...	2	31
Number of deaths :				
at home	...	...	...	9
in hospital	...	...	...	22
				31
<i>Causes of death</i> :—				
1. Directly due to pregnancy :—				
Toxaemia	...	...	...	11
Puerperal sepsis	...	...	...	7
Haemorrhage (1 Abortion)	...	...	...	5
Thrombosis	...	...	...	1
Embolism	...	...	...	2
Ruptured ectopic gestation	...	...	1	27
2. Due to a concurrent independent disease :—				
Empyema	...	...	...	1
Myocarditis	...	...	...	2
Pyelonephritis	...	...	...	1
			—	4
			—	31

*Discharging Eyes.*

Medical aid was called by midwives to 82 babies suffering from discharging eyes—the midwife is bound under her rules to call attention to cases however slight so that no serious case may be left unattended by a doctor. Most of the cases cleared up quickly under suitable treatment. There were 23 notifications of children suffering from ophthalmia neonatorum. All the cases are followed up and supervised until recovery is complete. Seven cases were sufficiently severe to necessitate admission to hospital. Two infants died within a fortnight of birth. The others appear to have made a good recovery with the exception of one child who still has slight cloudiness over the eye.

*Special Visits and Inspections.*

The number of visits paid to midwives during the year was 1084. This includes the work of the County Health Superintendents and of Miss Milford and her assistant as supervisors of midwives. Many special enquiries have been made in addition to the routine inspection visits and the midwives are given every opportunity to discuss their work.

## WELFARE OF THE BLIND.

The number of blind persons on the register was 665, ten less than in the previous year. The decrease in the occurrence of blindness in the younger periods of life, even in so short a period as ten years, is evidenced in the following statement.

Percentages in age groups.				
	Registered Blind Persons.	Ages at which blindness occurred.		
	1923	1933	1923*	1933
0—5	.9	.15	30.2	15.95
6—20	9.6	4.7	10.1	8.0
21—50	29.75	17.1	23.65	23.8
Over 50	59.7	78.1	31.55	52.3

\*In 29 cases, the age was unknown.

In 1923 there were 59 blind persons under the age of 21 years, but in 1933 the number was 32 : in the latter year over three-quarters of the blind were above the age of 50 years. The table shows also how serious a cause of blindness has been ophthalmia neonatorum : over a quarter of the persons in 1923 had been blinded before their first birthday, while ten years later the proportion was reduced by one-half. This affection has been notifiable for some 20 years, and, so far as information is available, in only two of 469 cases has there been any permanent defect of vision and that only slight in each case.

The County Council is fortunate in having as their Agents for the care of the Blind a very keen voluntary County Association with an invaluable Honorary Secretary in the person of Mrs Page. There are three salaried whole time Home Teachers and some 146 Voluntary Workers.

The number of blind persons under visitation was 666 : in addition, the Home Teachers were in touch with 169 persons with seriously failing eye-sight. On the average, visits are paid about once a month but where special help is required closer touch is maintained. Instruction is given in Braille and Moon, and special efforts are made to teach the manual alphabet to the deaf and blind, some 35 in number. Mrs. Page says "that in some cases sons or daughters get interested and learn it also which means the deaf and blind person can enter into conversation with them instead of being cut off entirely."

Mrs. Page gives notes on the 13 home workers (7 men and 6 women), all of whom she visits from time to time. The occupations include piano tuning and teaching, machine knitting, hand knitting, chair seating, mat and stool making, basket making, boot-repairing and tea rounds. Most are doing fairly well, but a great trouble is to find a regular market for the work. One totally blind young man does the boot repairs at the Westbury-on-Severn Public Assistance Institution and it is hoped that another may be given a similar opportunity in another Institution.

Apart from these regular workers trained in institutions for the blind, the home teachers teach those who are capable of doing them, simple occupations which employ and interest them, but here again the trouble is the market for

their work, though many voluntary helpers assist in various parts of the County ; sales are arranged at various houses in the County and stalls at large exhibitions. Other persons are taught reading and writing in blind characters to enable them to read embossed books and communicate with their fellows ; there are, however, many who cannot be helped even to this extent. By friendly visits of the voluntary workers and the home teachers as much as possible is done to brighten their lives. Also 187 blind have been provided with wireless sets and maintenance through the Schroeder fund and 52 from the National Fund. Another very practical work of the Association is the assistance given to blind persons in obtaining the special pensions available from various Charities : these total to a figure of over £1,500 in any one year. The Workshops for the Blind in Cheltenham, now the property of the County Council provide regular work for 26 blind persons.

While these are the main directions in which the Association help the blind, the special funds at the disposal of a voluntary body—some £1,500 including the Workshops dividends, etc.—enable them to give assistance which would be beyond the range of official sources. In addition to all this material help, friendly visits by the voluntary workers, parties, sales and occasional presents alleviate in considerable degree the special disabilities of blindness.

The Association presented the following report for the year to 31st March, 1933.

The Committee desire to express sincere thanks to all those who have co-operated with them in work for the Blind, their valuable help being greatly appreciated.

**REGISTRATION.**—There were 665 registered blind in this County at the close of the current year. During the 12 months 76 new cases have been reported, 60 blind have died, 8 have left Gloucestershire and 8 have been removed from the index as not “ blind within the act.”

In addition, there are 164 cases of defective vision kept under observation. In September 1932, Miss Bramhall, Inspector for the Ministry of Health, visited Gloucestershire. She saw the Hon. Sec. and the 3 Home Teachers, visiting with them, some of the Blind in their respective areas. She also made a thorough inspection of the Cheltenham Workshops.

**EDUCATION, TRAINING, EMPLOYMENT, ETC.**—All children who are educable are at Schools for the Blind, 12 at Westbury-on-Trym, 2 at Rhyl and one at Birmingham. Ten over 16 years of age are under training in Blind Institutions. There are 14 Registered Home Workers, 23 employees in Blind Workshops and 67 others have some employment whereby they can earn a little. Nine are in Resident Homes for the Blind, 5 in Mental Asylums and 34 in Poor Law Institutions.

Twelve men and women are both totally blind and totally deaf.

**EMBOSSED LITERATURE.**—There are 58 Members of the National Library for the Blind and 9 magazines in Braille and Moon Type are circulated among 65 Blind Readers.

**FINANCE.**—It appears likely that there will be a further increase in the amount of the County Collection organised by Mr. King Cummings, Secretary of the Western Branch of the National Institute for the Blind, but we can only show in the Accounts the sum received up to the end of January. The contributions for February and March are not yet to hand.

**GRANTS, PENSIONS, ETC.**—The Gyde Trustees have kindly continued their annual grant of £50 for the Blind Children of the County and have also helped with fees for training. Pensions have been received from the Cloth-worker's Company, Gardener's Trust for the Blind, the Hetherington Charity for the Aged Blind, the Royal Blind Pension Society, Sir Beachcroft Towse Ex-Service Fund and the National Institute for the Blind.

The Case Committee has met quarterly and has considered 545 applications. £1,039 has been spent on weekly grants to raise incomes, with benefits, to 15s. a week. These grants have been distributed through the kind help of 80 Almoners. A sum of £52 11s. 2d. has been expended on special needs for 62 Blind persons.

The Association makes every effort for the prevention of blindness and, during the past year, 44 cases have been helped with fares, treatment and cost of glasses.

66 cases have been examined by Ophthalmic Surgeons for certification of blindness, 17 of which were not certified.

Christmas Gifts of knitted goods made by the Blind, coal, money, groceries, etc., were distributed to 220 of the aged, lonely and infirm Blind, Miss A. E. Hutchinson collecting £3 6s. 10d. for the Blind of the Newent Area and the Association contributing £32. The Dickens Fellowship sent gifts of tea, etc., to 122 Blind in Cheltenham.

On December 8th, 1932, Miss Mary Hayward, a totally blind lady of Arlingham, celebrated her 100th birthday, receiving a telegram of congratulation from the King. The Association gave her a birthday cake.

**HOME TEACHING SERVICE.**—Miss D. Bedford passed the Certificate examination in May 1932 with honours in two subjects. A good average in visiting has been maintained by the three Home Teachers. During the year they have paid 5,364 visits, covered a mileage of 23,734, given 503 lessons and written 2,813 letters.

They have 40 pupils for Braille, Moon and handicrafts. Two totally deaf-blind have been taught to read Moon through the Manual Alphabet, and such new handicrafts as reversible mats, rod baskets, nutmeg necklaces, embroidered canvas aprons and simple leather work have been taught.

**SALES OF BLIND WORK.**—Twelve sales have been held during the year, realising £194 3s. 2d. In addition the Home Teachers have taken £97 8s. 3d. by private sales, and the Depot at 9, Silver Street, Tetbury, so kindly managed by Mrs. John Warre, has contributed £15 7s. 7d. making a total of £306 19s. 0d. The whole of the profits have gone to the Blind workers.

**SOCIAL CENTRES.**—Clubs have been held throughout the year at Charfield, Cheltenham, Cinderford, Cirencester, Coleford and Stroud and have been well supported.

**WIRELESS.**—Since November 1932 the work connected with Wireless for the Blind has been most kindly taken over by Miss Victoria Webb of Delmar, Cheltenham. The Cirencester District of Girl Guides presented a wireless set with loud speaker and the Girl Guide Local Association for Campden District allocated £10 to the Glos. Blind Wireless Fund, to commemorate the 21st anniversary of the Girl Guide movement.

The beautiful sets provided by Mr. and Mrs. Helmut Schroeder are now enjoyed by 186 Blind in Glos., including 21 St. Dunstan men. 34 one-valve sets and 4 two-valve have been sent by the British Wireless for the Blind Fund. 390 certificates for free wireless licences are now in use.

The Committee of the Cheltenham Workshops for the Blind (of which the Rev. R. H. M. Bouth is chairman), included the following :

**REPORT FOR THE YEAR ENDED MARCH 31ST, 1933.**

The Economic Crisis shows no signs of passing away and is having a serious effect on nearly every class of business at the present time. It is found difficult to dispose of goods except at considerably reduced prices and it is probable that many articles especially those that are produced in competition with imported goods are being sold to-day at lower prices than ever before. In view of this reduction, which has been found necessary in the case of many things produced in these workshops it may be considered that a falling off of £28 in the sum realised by Sales is not more than might reasonably be expected. The amount of work done has certainly not been less than in the previous year and the high standard at which we aim has been maintained. We are glad to record an increase in the orders received from Public Authorities, and that it is becoming understood that the blind can produce mats and baskets which will not suffer by comparison with those made elsewhere. Our workers at the end of the year numbered 24—20 men (one being a learner) and 4 women. This is two less than a year ago, owing to the death of Wilfred Jones, and the removal of John ter Meulen. The average age of employees is 46.

A fire which occurred on the premises during the evening of February 15th resulted in considerable damage to a shed and the destruction of 120 bundles of rods. The prompt attendance of the Fire Brigade prevented the spread of the fire to other buildings, and the shed has now been entirely rebuilt. Mrs. Page has joined the Workshop Committee in place of Miss S. Ker, who found that her many duties made it impossible for her to attend the meetings. Mr. J. Blackwell is invited to attend Committee Meetings as a Representative of the Gloucester (City) Blind Association.

**SCHEME FOR THE EXTENSION OF MEDICAL SERVICES**

The scheme was devised in 1919 with the object of arranging the treatment activities of the County Council as one service with centres of treatment common to all—school children, mothers and infants, tubercular children and adults, cripples and others with orthopaedic defects, etc. A further aim was to utilise existing agencies—medical, nursing and hospital—to the fullest possible extent in place of arranging new services and special places. Other objects, not achieved as yet were : (1) the utilisation of the out-stations as general consultation centres for insured persons, sick and infirm under the Public Assistance Committee, and the community generally and (2) closer co-operation of the General Hospitals with the smaller hospitals in their respective areas.

In the summer of 1932 a survey was made on behalf of the Minister of Health, of the health services in the County, including these treatment arrangements. The letter of the Minister thereon includes the following observations : "He is glad to learn of the close co-operation maintained between the medical services of the County Council and the voluntary institutions and the general body of medical practitioners in the County, and he has observed with interest and appreciation the continuing development of the 'Scheme for the Extension of Medical Services,' in which it appears that co-operation of this kind has been achieved in a high degree and with valuable results. . . . As the Council are aware, a further object of the (Local Government) Act (1929) was to secure that, as soon as circumstances permit, the provision of such services as hospital accommodation for the sick, which is at present under the Poor Law, should be undertaken as a public health responsibility. . . . It is also of importance that definite arrangements should be made for the services of the specialist officers of the public health department to be readily available for consultant purposes at the Institutions. Generally, it will be appreciated that in order to enable the County Medical Officer to discharge his duties under Article 165 (2) of the Public Assistance Order 1930, he should exercise a general supervision over the medical services, even though they may continue for the time being to be carried on under the Poor Law Act, and his relationship to the Committee administering those services should be no less intimate than if they were being provided under one of the enactments specified in Section 5 of the Local Government Act, 1929."

The machinery of the Treatment Scheme can be made available for the care of patients in question immediately the County Council decides to take advantage of it in this connection.

During 1932 one new Out-Station was opened, at Wotton-under-Edge on 2nd January, and arrangements were made for a new building at Newent and for the use of rooms at the Northleach Public Assistance Institution. With these the more populous parts of the County will be covered with centres where treatment, not otherwise available, can be given for all groups of persons and where arrangements can be made for the attendance of ophthalmic, aural and orthopaedic surgeons, physicians and Tuberculosis Medical Officers to see groups of selected patients. There will still be considerable sparsely populated areas for which provision could be made appropriately in a simple manner, for example, in a treatment room at the District Nurse's Home.

## TREATMENT SERVICES.

		1922		1932	
No. of Out-Stations		8		16	
Openings :					
Weekly ...	...	407		761	
Intermediate ...	...	—		962	
		—	407	—	1723
No. of Cases :—					
School Children ...	...	942		4831	
Tuberculosis ...	...	117		381	
M. & C.W. ...	...	109	1168	1179	6391
		—		—	
Attendances :—					
School-children ...	...	2282		14748	
Tuberculosis ...	...	471		1308	
M. & C.W. ...	...	331		4167	
		—	3084	—	20223
Average attendances per opening		7.5		11.7	
Special Services :					
Surgeon's Visits ...	...	45		261	
Cases—Vision ...	...	489		1850	
Ear, Nose & Throat		210		1960	
Orthopaedic		6		1402	
Heart	...	—		103	
		—	705	—	5315
Throat operations ...	...	159		832	
COSTS :—		£ s. d.	£ s. d.	£ s. d.	£ s. d.
Special Services :—					
Operations ...	...	250 8 6		897 10 6	
Examinations ...	...	424 12 0		1829 5 7	
		—	675 0 6	—	2726 16 1
Medical Officers ...	...		625 16 0		1157 11 2
Other ...	...		1091 6 5		2648 18 8
			—		—
Orthopaedic ...	...		2392 2 11		6533 5 11
			—		3118 15 3
			—		—
			2392 2 11		9652 1 2
Average cost (in shillings)					
Total cost (less orthopaedic) per attendance		15.5		6.45	
Medical officers per attendance ... ...		4.3		1.3	
Special services per case		12.0		6.9	

The newer Out-Stations at Coleford, Newent and Wotton-under-Edge are more commodious than those originally provided when it was not realised that the work would grow to its present dimensions : the older buildings especially those at Cinderford and Soundwell have proved small and inadequate for the numbers of patients now attending. Arrangements have been made for new accommodation at Cinderford and the time for considering an extension at Soundwell has arrived.

The development in the work in the ten years between 1922 and 1932 is shown in the comparative statement on the previous page—from this, too, it will be seen that the average costs per attendance are now about one half what they were in 1922.

Mention was made last year of a development in the use of certain Out-Stations by the provision of dental treatment for expectant and nursing mothers. Five Out-Stations were equipped and work was commenced on 1st September, 1931. The arrangements whereby the County Dentists undertake this new branch proved very successful from the start : as recorded by Dr. Morris Jones in her report (p. 19). 131 mothers, 47 children under 5 years and 12 of school age had treatment during 1932.

### ORTHOPAEDIC TREATMENT.

Prior to 1922 the only orthopaedic defects treated in this county at the public expense were those due to tuberculosis, which is the cause of about one-third of the cases. The Medical Services Committee then arranged for the treatment of a few special cases due to other causes at certain hospitals and appointed an orthopaedic nurse on 1st November 1925. The following year arrangements were made for six beds at the Cheltenham General Hospital and with the Surgeon (Mr. J. S. Robinson) to visit certain out-stations quarterly for the examination of patients : in January, 1929 a second orthopaedic nurse was appointed, and the two nurses held weekly clinics at the out-stations. In January, 1930, the arrangements were enlarged on the lines of the general treatment scheme and the orthopaedic work was distributed among the three hospital areas : some minor changes have been made but, for practical purposes, the following arrangements have now been in force for three years.

#### In-patient Treatment :

							Beds.
Cheltenham General Hospital	...	...	...	...	...	...	4
Gloucestershire Royal Infirmary and Children's Hospital	...	...	...	...	...	...	3
Bristol Hospitals, Winford Orthopaedic Hospital and special hospitals	...	...	...	...	...	...	5
							—
							12
							—

Orthopaedic Clinics quarterly at the following out-stations :

Cheltenham Hospital Area : Mr. J. S. Robinson.

Chipping Campden, Cirencester, Fairford, Stroud and Tewkesbury.

Gloucester Hospital Area : Mr. J. F. H. Stallman.

Berkeley, Cinderford, Coleford, Lydney and Newent.

Bristol Hospital Area : Dr. Ethel M. Redman.

Chipping Sodbury, Soundwell and Thornbury.

Weekly Clinics by the Orthopaedic Nurses at the following out-stations :—

Miss D. A. Rodenhurst : Chipping Campden, Cinderford, Coleford, Lydney, Newent and Tewkesbury.

Miss J. Shepherd : Berkeley, Chipping Sodbury, Cirencester, Fairford, Soundwell, Stroud, Thornbury and Wotton-under-Edge.

Information of the existence of cases is received from various sources, in particular, from School Medical Inspectors and District Nurses as Health Visitors. The keenness of the latter is shown by the large proportion of children under 5 years of age : thus of the 748 seen by the surgeons 273 were under 5 years of age and of these 84 were under one year of age. During the past seven years 2333 children have been under review : 449 have been removed from the register—on leaving (433) or dying (16)—and of the remaining 1884, 530 were reported to be cured. This figure includes a proportion of postural deformities such as adolescent scoliosis, which condition Dr. Redman describes as responding nicely to remedial exercises : flat foot, however, predominates and responds similarly. It is very satisfactory that mild degrees of deformity are detected and referred for appropriate treatment.

On the whole, the number of beds for acute surgical treatment suffices and a few patients have the advantage of prolonged treatment at Winford Orthopaedic Hospital which is also a special school. There is much larger provision for combined treatment and education for children with defects due to tuberculosis in the Surgical Block at Standish House.

The summary of the work done year by year still shows development. The number of children seen by the Surgeons increased from 502 in 1929 to 748 in 1932 and the attendances for examination from 801 to 1223 and at the Nurses' weekly clinics from 2063 to 4014.

Each of the surgeons presented encouraging reports giving details of the work undertaken in their respective areas.

## INFECTIOUS DISEASES.

For the third year in succession the County was comparatively free from notifiable infectious disease. The numbers of cases notified in each district are given in Table 11 at the end of this report.

### SCARLET FEVER.

The wave of this disease appeared to be rising in 1932 : 430 cases were reported, 73 more than in 1931, which even so is rather a small number.

No. per year (Average).	1932	1929- 1931	1926- 1928	1923- 1925	1920- 1922	1917- 1919	1914- 1916	1911- 1913	1908- 1910	1905- 1907	1902- 1904	1899- 1901
Cases ...	430	602	687	672	528	293	1152	999	648	689	1216	1079
Deaths ...	1	1.7	5	5	5	1	14	11	7	9	22	21
Hospital Cases	287	357	362	355	218	151	582	498	286	221	371	—
Case Fatality	.23	.28	.77	.74	.88	.46	1.24	1.07	1.08	1.26	1.84	1.98

As will be seen from the above table the disease appears to be considerably less prevalent than in the beginning of the century and to be much milder in type. Comment on this fact is a usual note in the reports of the Medical Officers of Health, but in 1932 Dr. Morley mentions a localised outbreak of 39 of the total 102 cases in the Borough of Cheltenham which was of a more severe type. Only one death was recorded, that of a child under one year of age in the Chipping Sodbury R.D.

### DIPHTHERIA.

In only two years, 1923 with 178 cases, and 1928 with 202, were fewer cases notified than in 1932, when the number was 214. The general trend during the present century is set out in the following summary :

No. per year. (Average.)	1932	1929- 1931	1926- 1928	1923- 1925	1920- 1922	1917- 1919	1914- 1916	1911- 1913	1908- 1910	1905- 1907	1902- 1904	1899- 1901
Cases ...	214	373	251	247	384	273	476	406	479	595	374	387
Deaths ...	16	26	20	19	31	29	64	27	44	51	38	52
Hospital Cases	187	290	184	153	212	174	221	126	177	146	51	—
Case Fatality	7.5	7.0	7.8	7.8	8.0	10.6	13.5	6.6	9.25	8.5	10.1	13.5

Anti-toxin appears to be used for treatment in almost every case and now the practice of immunisation of those in such close contact with cases as are nurses in hospital is growing. Dr. Morley mentions that this is done in the Delancey Hospital in Cheltenham. The desirability or otherwise of attempting general immunisation of the population appears to be an open question. Dr. Morley includes in his report interesting observations on this subject and says "it is generally concluded that it would be necessary to maintain at least one-third of the school population in a state of immunisation before the incidence of the disease would be materially reduced by this measure." He refers to the fact that the number of towns in which this protection is offered is rapidly growing and says that "it is a serious question as to whether facilities might not be offered to those desiring to avail themselves of protection for their children against this deadly disease which is at times so insidious in its onset that, though we possess a most perfect weapon for treatment, it is at times too late to prevent a fatal issue." That it is still a fatal disease, though less so than thirty years ago, is evidenced in the above table: this fact appears to be due in the opinion of the Medical Officers of Health to delay in seeking medical help with the result that it is too late for anti-toxin treatment to have its full effect.

Another trouble is the persistence of the organism in the noses and throats of carriers detected by swabbing of contacts, now undertaken so generally. Very practical endeavours to overcome this trouble are made in Dr. Rhind's districts by testing the organism for its virulence. Twelve such tests were made in 1932 and Dr. Rhind gives the following interesting details:

- (1) A boy, aged eight years, a contact, gave a positive result from swabs of the nose for some months. As no other cases occurred in the house, a virulence test was made, and the germ proved to be non-virulent.
- (2) A man, aged forty years, was admitted to hospital; test showed non-virulent; stay in hospital cut short.
- (3) A girl, aged twenty years, contact of number two, removed to hospital upon notification, test showed non-virulent germs.
- (4) A girl, aged thirteen years, had rather severe attack with positive swabs; after four months' home treatment and repeated positive swabs, a virulence test showed the germ to be non-virulent.
- (5) Man, aged thirty-eight, had severe attack with much swelling of the neck; positive swab, and removed to hospital. After repeated swabs, a virulence test was made, and the germ proved non-virulent. The man was discharged from hospital, his stay being curtailed.
- (6) In November seven cases of bacteriological diphtheria were notified, three were sent to hospital and subsequently proved to be non-virulent and were discharged; four were treated at home and also proved to be non-virulent upon testing.

“ One case of a woman admitted to hospital in the early part of November proved to be very virulent six weeks afterwards and remained in hospital another six weeks before being cleared.”

#### ENTERIC FEVER.

An unusually large number of cases was reported during 1932, namely 34. They occurred in 16 districts and were scattered over the year : 11 of the 34 were stated to be due to paratyphoid B organism but no one appears to have been traced to a definite source. No special significance would appear to be attached to the unusual incidence.

The general fall in the occurrence of this trouble is seen in the following statement :—

No. per year (Average.)	1932	1929- 1931	1926- 1928	1923- 1925	1920- 1922	1917- 1919	1914- 1916	1911- 1913	1908- 1910	1905- 1907	1902- 1904	1899- 1901
Cases ...	34	21	32	51	28	41	41	51	49	65	77	141
Deaths ...	6	.7	6	6	3	7	9	6	9	9	10	23
Hospital Cases	23	13	16	17	14	12	14	18	19	23	18	—
Case Fatality	17.7	3.2	17.7	11.7	10.9	17.9	23.0	11.8	19.2	13.8	13.0	16.1

#### CEREBRO-SPINAL MENINGITIS.

Another unusual feature in 1932 was the fact that so many as eleven cases of this disease were notified. They occurred at ages from 8 months to 43 years and 6 were fatal. The occurrence of a few sporadic cases early in the summer suggested the possibility of serious developments and a reminder of the facilities for examination of specimens of cerebro-spinal fever was sent to Medical Officers of Health : fortunately the possibilities were not realised.

#### OPHTHALMIA NEONATORUM.

The number of cases notified was 23, about the average, but in only one case was the child left with permanent trouble, described as “ light cloudiness.”

#### TUBERCULOSIS.

The number of cases notified was 490; 335 of the pulmonary form and 155 tuberculosis of other parts. The ages and sex of the patients were :—

## NEW CASES AND MORTALITY DURING 1932.

Age Period.	NEW CASES.				DEATHS.			
	Pulmonary		Non-Pulmonary		Pulmonary		Non-Pulmonary	
	M.	F.	M.	F.	M.	F.	M.	F.
0	...	—	—	—	—	—	3	2
1	...	—	—	12	9	—	—	1
5	...	4	8	30	25	—	1	—
10	...	8	12	18	19		—	
15	...	30	28	5	6	22	23	4
20	...	26	33	3	5		—	
25	...	39	42	5	10	27	28	1
35	...	30	17	2	1	15	10	3
45	...	23	17	—	3	20	12	2
55	...	8	7	—	—	12	7	—
65 and upwards	1	2	—	1	1	5	1	2
TOTAL	...	169	166	75	80	97	86	15
								16

The total number of persons in the County known to have illness attributed to tuberculosis—and consequently notified—and the deaths among those so notified, are set out year by year in the following table :—

	PULMONARY					NON-PULMONARY.				
	Known cases in county during year		%			Known cases in county during year.		%		
	Deaths	Death rate.	Survivors			Deaths	Death rate.	Survivors		
913	...	493	41	8.3	452	121	13	10.7	—	108
914	...	977	209	21.4	768	223	25	11.2	—	198
915	...	1,242	214	17.2	1,028	307	36	11.7	—	271
916	...	1,459	345	23.6	1,114	368	50	13.6	—	318
917	...	1,490	242	16.2	1,248	381	35	9.2	—	346
918	...	1,685	260	15.4	1,425	408	27	6.6	—	381
919	...	1,686	234	13.9	1,452	428	39	9.1	—	389
920	...	1,736	211	12.2	1,525	423	25	5.9	—	398
921	...	1,784	190	10.6	1,594	442	25	5.65	—	417
922	...	1,923	248	12.9	1,675	463	29	6.3	—	434
923	...	1,954	191	9.8	1,763	573	51	8.9	—	522
924	...	1,978	237	12.0	1,741	584	33	5.65	—	551
925	...	1,995	240	12.0	1,755	595	28	4.7	—	567
926	...	2,009	138	6.8	1,871	713	45	6.4	—	668
927	...	2,097	194	9.3	1,903	782	34	4.35	—	748
928	...	2,158	216	10.0	1,942	847	37	4.4	—	810
929	...	2,213	194	8.8	2,019	978	28	2.9	—	950
930	...	2,277	184	8.1	2,093	1,045	24	2.3	—	1,021
931	...	2,353	200	8.5	2,153	1,150	25	2.2	—	1,125
932	...	2,278	224	9.85	2,054	1,193	28	2.3	—	1,165

Under the Regulations of the Minister of Health of 18th Dec., 1924, the names of persons are removable from the register after a prolonged period of absence of symptoms of tuberculosis other than those compatible with a completely healed lesion. The numbers

so removed in 1932 were 146 pulmonary and 42 non-pulmonary cases : the totals in the 7 years were 632 and 223 respectively. These are included in the above table.

The number of living persons known to have had pulmonary trouble appears to be fairly stationary at about 2,200 to 2,300, that is about 7 of every 1000 of the population. The death rate among this group appears to be about 9 per cent. yearly.

As regards non-pulmonary tuberculosis, which is in the majority of cases a much more chronic condition, it does not appear that complete information as to the actual incidence of illness in the population has been reached, even twenty years after notification commenced. The death rate, however, has been fairly constant in the past three years at about  $2\frac{1}{4}$  per cent.

The work undertaken in connection with the Tuberculosis Scheme is summarised in the following paragraphs.

#### *Dispensaries.*

The Tuberculosis Officers attend weekly at six dispensaries and periodically visit twelve out-stations. They also see patients unable to attend at one of these places in their homes and hold frequent consultations with the usual medical attendants. In 1932 in addition to the work set out in the following statement, the Tuberculosis Officers held 1,430 consultations, saw 720 patients at out-stations, and paid 221 home visits.

The new cases reported and the attendances at dispensaries were :—

New cases reported—					
Pulmonary	...	...	...	...	335
Other Forms	...	...	...	...	155
			Total	...	490
New Cases examined (including contacts)					1,113
Attendances					5,918

#### *Shelters.*

The number of shelters in use during 1932 was 114. The number of patients to whom they were newly loaned during the year was 34, and the total persons who had the use of a shelter during 1932 was 145.

#### *Residential Institutions.*

All the beds at Standish House were in use during 1932, the average number of occupied beds being 233. 9 additional beds were reserved at the City Isolation Hospital. The admissions year by year were :—

				Beds available.		Admissions.			
				1928	1929	1930	1931	1932	
1.	<i>Early cases</i> in both sexes and advanced cases among males								
	Standish House	...	...	100	F.26	—	119	135	148
	<i>Surgical Cases</i>	...	...	38		9	43	28	43
2.	<i>Advanced cases</i> in City and Stroud Isolation Hospitals	...	...	45*		73	58	39	68
3.	<i>Surgical Cases</i> . Cheltenham General Hospital	...	...	10		11	17	21	27
4.	<i>Children</i> . Standish House	...	...	112		91	93	80	105
	Totals	...	...	305		303	346	316	404
									445

\* 36 up to 31st March, 1932.

### Compulsory Powers.

No case was compulsorily removed to a Sanatorium or Hospital under Section 62 of the Public Health Act, 1925, during the year, and, so far as information has been given, no action was taken under the Public Health (Prevention of Tuberculosis) Regulations, 1925, with respect to employees in the milk trade.

### Home Visits by Nurses.

The work of the Tuberculosis Officers is supplemented by visits to the homes of patients by nurses with a view to their directions being carried out and to improvements in the conditions under which the patients are living. The nurses undertaking this work in 1932 were the 8 County Health Superintendents, 3 whole-time Health Visitors, and 136 District Nurses.

The numbers of these visits have increased from 4,578 in 1917 to 11,340 in 1932.

### VENEREAL DISEASES.

From the following table, the number of new cases in 1932, 318, was nearly 100 less than that in 1931, 412.

	NEW CASES.					ALL CASES.				
	Syphilis.	Soft, Chancre.	Gonorrhœa.	Not Venereal.	Total	Males	Females	Attend- ances.	In-patient days.	Specimens examined
1917 ...	31	2	15	13	61*	25*	36*	258*	524*	75*
1918 ...	77	7	77	58	219	135*	76*	1,090	662	214*
1919 ...	125	16	143	68	352	264*	74*	2,729	1,549	249*
1920 ...	192	7	159	64	422	280*	134*	3,982	1,035	527*
1921 ...	103	6	87	91	287	175*	65*	3,292	1,083	484*
1922 ...	94	3	77	51	225	110†	50†	2,727	810	422*
1923 ...	80	2	72	76	230	89†	75†	3,322	654	632*
1924 ...	82	5	100	80	267	148†	92†	3,655	716	697*
1925 ...	87	—	94	101	282	138*	121*	3,729	876	986*
1926 ...	57	—	102	73	232	131*	80*	3,564	718	1,016*
1927 ...	98	—	94	123	315	160*	118*	4,363	1,073	1,030*
1928 ...	86	3	120	148	357	170	140*	5,511	639	670*
1929 ...	64	—	122	181	367	218	149	5,841	839	1,115
1930 ...	73	—	168	174	415	257	158	6,424	1,252	1,080*
1931 ...	83	—	153	176	412	230	182	8,742	1,596	1,489
1932 ...	56	2	119	141	318	176	142	7,335	1,082	1,096

\* Excluding Bristol Hospitals.

† Excluding Bristol and Gloucester Hospitals.

That so large a proportion of the persons attending as new cases should prove not to have venereal disease—43 per cent. in 1931 and 44 per cent. in 1932—is so far satisfactory as evidence that advantage is taken of the opportunity for treatment by persons who have been exposed to infection and that the desirability of early treatment is appreciated by them. The attendance of infected persons appears to be reasonably good for a County area : thus in 1932, excluding those regarded as non-venereal, the total was about 7,000 for 177 new cases, an average of about 40. Many of the 7000 attendances would have been made, however, by old cases extending from previous years.

It is hoped that increasing advantage will be taken of the opportunity for intermediate treatment, particularly of syphilis, at out-stations.

## BACTERIOLOGICAL AND PATHOLOGICAL WORK.

The examination of specimens on behalf of the County Council is undertaken in the three local laboratories, namely those at Bristol University, Cheltenham General Hospital (from 1st June, 1929) and Gloucestershire Royal Infirmary (from 1st April, 1926). The Wassermann tests for syphilis are made at Bristol, and at Gloucester (from April 1930).

The increased use made of these facilities by medical practitioners is evidenced in the following statement.

YEARLY AVERAGES.							
	1905-14	1915-24.	1925-29.	1930.	1931.	1932	
<b>GENERAL.</b>							
Tuberculosis	...	207	810	2,366	2,921	2,755	2,752
Diphtheria	...	1,553	1,152	3,261	5,123	5,625	3,732
Enteric fever—							
Bloods	...	49	47	43	130	168	312
Faeces and urine		—	—	5	2	1	1
Cerebro Spinal Fever		—	4	2	1	1	3
Puerperal Pyrexia	...	—	—	5	13	34	33
Other	...	—	1	—	1	—	—
		—	—	—	—	—	—
Total	...	1,809	2,014	5,682	8,191	8,584	6,833
		—	—	—	—	—	—
<b>VENEREAL DISEASES—</b>							
Wasserman...	...	—	335	637	534	620	549
Smears	...	—	98	374	546	933	539
Other	...	—	6	12	—	12	8
		—	—	—	—	—	—
Total	...	—	439	1,023	1,080	1,565	1,096
		—	—	—	—	—	—
<b>GRAND TOTAL</b>	...	1,809	2,453	6,705	9,271	10,149	7,929

## ISOLATION HOSPITALS.

No change of any importance was made in the accommodation available for cases of infectious disease. Some arrangement exists for the removal to hospital of a case, requiring isolation, from every part of the County but the facilities are more complete in some districts than in others.

The review of the circumstances of the County for the purposes of Section 63 of the Local Government Act 1929 is still under the consideration of the Public Health Committee.

## HOUSING.

Between 1911 and 1921 the number of structurally separate buildings occupied increased from 77,003 to 77,417, only .5 per cent. ; during the ten years 1921-31, the increase in comparable parts of the County was from 66,566 to 74,910 or 12.5 per cent. In the second period the population had increased 2.9 per cent. ; the contrast of this figure with the 12.5 for dwellings is an indication of greatly improved housing provision. But three other factors must be in mind, namely (1) the size of families is smaller and there are more to be housed separately (2) the condition of the older houses and (3) the management of the houses.

Reduction in the average number of persons per dwelling is observed, between 1921 and 1931, in every district, except Wheatenhurst R.D., and in most areas the decrease is considerable. In 22 of the 27 districts for which comparative information is available, the average density per dwelling was 4 persons or over in 1921 : only 10 districts had 4 or more persons per dwelling in 1931.

In the Census Report are also given particulars of the numbers of dwellings with the numbers of rooms in them : of 89,561 in the administrative County, 15,625 or 17 per cent. had only 3 rooms or less ; 23,216 or 26 per cent. had 4 rooms and 50,720 or 56 per cent. had 5 rooms or more. Similar particulars are given for each district in the County and from them each authority can gain useful information.

Another interesting fact is that while at the census in 1921 3.4 per cent. of dwellings were vacant, the proportion in 1931 was 3.8 per cent. In the 1931 Census report a distinction is made between furnished and unfurnished vacant dwellings : of the total 3432, 1,307 were furnished and 2,125 unfurnished. The proportion of small houses vacant is appreciably larger than of those of moderate

size. The average for unfurnished houses for the whole county is 2.4 per cent.; for dwellings of different sizes the proportions were

1 and 2 rooms	...	...	...	4.7%
3	"	...	...	3.0%
4	"	...	...	2.1%
5	"	...	...	1.9%
6 and more	...	...	...	2.4%

Information of the condition of the houses is not available and bad state possibly explains vacancy in a proportion. On the other hand the above statement appears to support the view that there is a larger demand for houses with three bedrooms at least, than for the smaller houses, in spite of the reduced size of family.

Probably at no period has there been greater activity in the provision of new houses than during the past twelve years, and the rate of development has overtaken the stagnant years of the Great War. The total number of houses built in the twelve years 1921-32 (exclusive of Stow-on-the-Wold Urban District and Newent, Stow-on-the-Wold and Warmley Rural Districts during 1932) was 12,208 an average of over 1000 per annum, nearly three times the pre-war rate.

Taking the County *as a whole* the requirements in November 1919 were estimated by the District Councils to be 6,400 new houses. At the pre-war rate of building which appears to have been about 350 a year, there would have been required for the normal increase in thirteen years a further 4550 houses, making a total of 10,950. The number actually built (*less four districts in 1932*) according to the following statement has been 12,436, an excess of 1,486. The figures given by the Medical Officers of Health, year by year, are :

	Under Schemes.			Privately.	Total.
1919	...	...	...	—	53
1920	...	...	...	98	175
1921	...	...	...	865	1,036
1922	...	...	...	731	959
1923	...	...	...	12	375
1924	...	...	...	92	598
1925	...	...	...	165	901
1926	...	...	...	309	1,103
1927	...	...	...	642	1,466
1928	...	...	...	329	1,126
1929	...	...	...	480	1,277
1930	...	...	...	384	968
1931	...	...	...	642	1,349
1932	...	...	...	308	1,050*
<b>TOTAL</b>	<b>...</b>	<b>...</b>	<b>5,057</b>	<b>7,379</b>	<b>12,436</b>

\*Return for Stow-on-the-Wold U. D., and Newent, Stow-on-the-Wold and Warmley R.D. not available.

In some areas there has been very great activity, but in others the numbers are small. Amongst the latter is East Dean R.D., which instances one of the difficulties of local authorities in this matter : in that area there has been considerable depression owing to the state of the coal industry and the Census has revealed a reduction of 2.8 per cent. in the population. Even so, there is room for improvement not only here, but probably in every part of the county, by the re-conditioning of existing houses as urged by the Minister of Health in his address to the County Council's Association, quoted at p. 41 of the Report for 1931. The County Council agreed on 12th April, 1933, to consider applications for assistance in re-conditioning houses under the Housing (Rural Workers) Acts. It is to be hoped that considerable numbers of houses will be improved, in particular, by the addition of a bed-room to houses containing only two bed-rooms.

### **WATER SUPPLY.**

The rainfall was once more above the average and, as is usual in wet years, there were few complaints of shortage of water. In the urban districts there appear to have been none, but deficiency is noted in respect of parts of Iron Acton in Chipping Sodbury R.D., Hempstead, Matson and Upton St. Leonards in the Gloucester R.D., Leigh and Elmstone Hardwicke in Tewkesbury R.D., and Frampton on Severn, Fretherne with Saul, Moreton Valence, Longney and Whitminster in Wheatenhurst R.D. Some of these complaints are very long standing and are greatly accentuated in dry years.

The more notable developments of 1932 were :

- (a) The West Gloucestershire Water Company brought their Shipton Moyne source into operation on 17th November, 1932, thereby providing a softer water for their area of supply and also an alternative supply for Long Newnton and Shipton Moyne in the Tetbury R.D. where chlorinated water has been used for four years.
- (b) The provision of a supplementary supply for Stroud U.D. from the mains of the Stroud Water Company from which 16 million gallons were taken in 1932.

Minor improvements were effected in other parts : e.g., a new reservoir for Willersey (Campden R.D.) at a cost of £530, extra mains in Hinton and Pucklechurch (Chipping Sodbury R.D.) and enlargement of the reservoir at Coaley (Dursley R.D.).

Negotiations with the Ministry of Health were proceeding with respect to the water supply of Dursley, Cam and Kingswood (Dursley R.D.) at a cost of £11,000, and tenders were invited.

There are other places than those mentioned in which the circumstances could be improved with advantage and a general survey of the resources of the County would probably show that by well considered arrangements practically all parts—at present without the advantage—could be given the benefits of an adequate piped supply.

### SEWERAGE AND SEWAGE DISPOSAL.

Minor improvements were effected in various parts, for example, extra land for sewage farm at Cirencester U.D. and extensions of sewers in places. The most important was the completion of the sewerage for Chipping Sodbury and parts of adjoining parishes in that district out of a loan of £13,000.

Trouble has arisen in connection with the Kingswood U.D. where pollution of the stream occurs by the effluent from the disposal works which take the sewage from Siston in the Warmley R.D. Action was threatened and application was made by the Urban District Council for a loan of £14,200 for renovating the filter beds : now a joint scheme with the Warmley R.D.C. is under consideration.

The most serious complaint is made of Thornbury in the Rural District of that name : it has long been recognised that sewerage should be provided and a scheme estimated to cost £34,500 was prepared and a local inquiry was held by the Ministry in 1930. Unfortunately the scheme was promoted just too late for an unemployment grant and had to be abandoned. Dr. Rhind observes : “It is regrettable indeed that the sewerage system for the town of Thornbury has not been accomplished and the same disgusting system of having to carry the earth buckets through many of the houses continues. This work could find employment for 100 men for more than a year, probably eighteen months, owing to the nature of the rock upon which the town is built. These same men have been during the past year, and apparently will go on, drawing between £5,000 and £6,000 a year for doing nothing but idle about. It is unfortunate that this money cannot be put to better use.” It appears that a modified scheme has been prepared and it is hoped that it may prove possible to give effect to it. Other parts most of which have been mentioned periodically as needing improvement are Stroud U.D. (disposal works), Tewkesbury B. (disposal works), parishes, especially Kingswood, in the Dursley R.D., Drybrook, Ruardean and Mitcheldean in the East Dean R.D., Hempsted,

Quedgeley and Tuffley in the Gloucester R.D., Lydbrook in the West Dean R.D., Eastington, Frampton-on-Severn and Saul in the Wheatenhurst R.D., and Alderton, Gotherington and Greet in the Winchcombe R.D.

### **SURVEY OF RIVERS.**

Meetings of Technical Officers were convened by the Ministry of Agriculture and Fisheries to consider further action with reference to the examination of the Severn and its tributary the Avon and were held at Warwick on 15th June (River Avon) and Worcester on 17th June (River Severn). It was then agreed that the determination of the oxygen content of the water gave a very useful indication of the conditions both from the Fishery point of view and the pollution of the stream with imperfectly purified sewage. It was further agreed that it would simplify procedure in the future if the surveys were made on a fixed day in each year : the third Tuesday in June was chosen for the Avon and the first Tuesday in July for the Severn. Further, it was agreed that all the necessary information for the purpose of these combined surveys could be obtained by sampling the water from the bridges and that in this way the work could be simplified greatly. The survey of the Severn was made on Tuesday, 5th July and of the Avon on Tuesday 19th July : Mr. Duncan, Public Analyst of Worcestershire, completed his tour of the Avon by sampling the stream at Tewkesbury.

It was desired, at the Conference on the Severn that further observations of the Severn at Minsterworth should be made over the period of the "bore" and these were undertaken by Dr. Gee and Lieut. Milne of the Ministry of Agriculture and Fisheries on 2nd and 3rd September.

Also, the Frome and the Chelt, tributaries of the Severn were sampled by Lieut. Milne and Dr. Blake on 4th August. These two streams were again found to be deficient in oxygen at various points. The Frome receives effluents from various sewage works on its banks, and, also, there is considerable contamination from the cloth mills and other works on its course : the Medical Officer of Health has been informed of the results of the observations with a view to reports thereon to the District Councils concerned. The effluent from the Cheltenham sewage works forms a considerable part of the volume of the Chelt below Boddington : the works are very complete and very well arranged, and are managed well, but the oxygen content of the effluent is not so high as might be expected, being only about 47 per cent. of saturation. At points above the effluent outfall, the proportion of oxygen is low : it is hoped that continued observations may throw light on the condition which is

somewhat obscure at present. By the time the stream has reached Norton Mill Bridge on the Tewkesbury—Gloucester Road the oxygen content is reasonably high and even at Boddington Bridge is very fairly good.

The general conclusion with regard to the main stream is that for the greater part of its course the oxygen concentration is good, though there are indications of pollution in certain places. In this County the stream is in reasonably good condition, though Dr. Gee was very doubtful of the water in the tidal reaches below Gloucester, largely owing to the very low oxygen content in samples taken over the bore in September 1929. The conditions then observed appear to have been exceptional, as they were not found in the survey continued over a week in the previous September and the long series of samples taken at short intervals on 2nd and 3rd September this year contained oxygen to the extent of 61.5 to 84 per cent. of saturation.

It is hoped that it may be possible to continue the observations on the Severn at Minsterworth and on the Frome and Chelt in addition to the general surveys of the Avon and Severn on the fixed dates.

### **DISPOSAL OF HOUSE REFUSE.**

House refuse has been collected systematically in most of the populous places of the County for many years, but there are many parts where it is dumped by householders in unsuitable positions and unsightly accumulations result. Where systematic collection has been arranged for rural parishes it has generally been done under contract with a local haulier : the refuse has thus been removed from houses but the tips are not always satisfactory. A departure from this parochial practice was made by the Warmley R.D.C. in 1928 : there were some parish collections but arrangements were then made for scavenging the whole area with a motor lorry. Similar parochial collections in the Stroud R.D. gave place in 1932 to systematic scavenging throughout the district in lorries by which the refuse is carted to out-of-the-way tips. In West Dean R.D. persistent complaints were made of unsightly heaps of refuse thrown on forest land : scavenging was arranged for Lydbrook in 1929 and last year the council started collection for the whole district purchasing a Ford 2-ton truck for the purpose in September. Such general collections are under consideration in other areas, for example in Chipping Sodbury and Thornbury R.D. and might well be adopted throughout the County. It would enable the tipping to be controlled and by satisfactory disposal and covering with soil, as in Cheltenham Borough for example, ground could be made up usefully.

Other places in which local scavenging was arranged in 1932 were Fairford in the Cirencester R.D., Frampton-on-Severn and Fretherne with Saul in the Wheatenhurst R.D. and Winchcombe and Greet jointly in the Winchcombe R.D.

### EXAMINATIONS OF FOODS AND DRUGS.

The County Analyst submits the following summary of the work undertaken during 1932.

During the year ending December 31st 1932, 897 samples have been examined under the Food and Drugs (Adulteration) Act, 1928, of which 109 were either adulterated or did not satisfy the standards laid down by the various regulations issued under the Act. This represents 12.1 per cent. of the number taken, which is an increase on the figure for the previous year.

The following is the percentage of adulterated samples for the past few years :—

1932	...	...	...	...	12.1 per cent. adulterated.
1931	...	...	...	...	8.8 do.
1930	...	...	...	...	8.9 do.
1929	...	...	...	...	8.6 do.
1928	...	...	...	...	10.8 do.
1927	...	...	...	...	15.0 do.
1926	...	...	...	...	12.6 do.
1925	...	...	...	...	10.4 do.

### MILK.

The number of samples of milk submitted was 515, of which 91 did not satisfy the standard laid down by the Board of Agriculture for genuine milk in the Sale of Milk Regulations. This number is far too high, and represents a large number of samples which fall below the standards, and are what are usually termed "naturally poor milk."

The fact remains that there is a good quantity of milk sold which is of very poor quality. It is "as it comes from the cow" and therefore it is useless to prosecute the vendor. It is far from satisfactory that milk of this quality should be sold at the same price as milk of good quality, of which there are large quantities. Large manufacturing companies and large dairies will not accept it, therefore the only outlet is the public.

The samples of genuine milk numbered 424, and the average figures are well above the standard laid down by the Board of Agriculture.

	Average for 1932			Board of Agriculture Standard.
			%	%
Non-fatty Solids	...	...	8.89	8.50
Fat	...	...	3.65	3.00
Total Solids	...	...	12.54	11.50

During the year proceedings have been instituted in 20 cases, and convictions have been obtained in 15 cases. Some of these cases were of a very serious nature.

#### DRUGS.

The new edition of the British Pharmacopœia came into operation in October 1932, and quite a number of samples show that they have been made in accordance with the formulae in the old edition. The vendors of these samples have been cautioned.

#### NON-ALCOHOLIC WINE.

One sample of this article sold as Elderberry Wine contained a preservative which is prohibited viz.: salicylic acid. The vendor was prosecuted and a conviction obtained.

#### PEPPER.

Two samples of Pepper, one formal and one informal were adulterated with 75 per cent. of rice flour. The vendor was convicted.

#### JAM AND MARMALADE.

Several samples fell slightly below the self-imposed standard of the Jam Manufacturers Federation; these brands will be kept under observation.

#### SAUSAGES.

Three samples of sausages contained preservatives, which were not declared. The vendors have been cautioned.

The fines ranged from 10/- including costs to £11 10s. 0d. including costs, and amounted in all to £95 18s. 8d.

Samples examined were as follows :—

SAMPLES EXAMINED 1932.

		Number examined.	Number adulterated.
Milk and Separated Milk	...	516	91
Condensed Milk & Dried Milk	...	10	1
Butter, Cream, Cheese	...	37	—
Margarine	...	21	—
Lard	...	2	—
Spirits and Wines	...	2	—
Beer & Cider	...	49	1
Non-Alcoholic drinks	...	21	2
Coffee, Tea, Cocoa...	...	16	—
Confectionery, Jam, Honey, Sugar and Sweets	...	77	4
Drugs	...	15	3
Pickles and Sauces	...	8	—
Sausages & Meat Foods	...	22	3
Flour, Bread, Rice, Baking and Egg Powders	...	15	—
Dried Fruit	...	33	1
Malt Vinegar	...	2	—
Pepper, Mustard and Spices	...	20	3
Other Foodstuffs	...	31	—
<b>TOTAL</b>	...	<b>897</b>	<b>109</b>

### MILK PRODUCTION.

*Reports from other authorities :—*

Thirty-five reports were received from other areas on matters affecting milk produced in this County. 19 with respect to tuberculosis, 3 Brucella Abortus and 13 general conditions.

Of the 19 tuberculosis reports, 13 came from Bristol. 3 from London, 1 from Birmingham, 1 from Kensington and 1 from Cardiff. The 19 farms were visited by veterinary surgeons and 551 cows were examined. Cows with tuberculosis were detected either on clinical examination or by bacteriological examination of the milk and confirmed post mortem at 14 farms. At 5 farms in spite of clinical examinations and bacteriological tests of the milk, no affected cow was found : 13 inoculation milk tests were made from one farm, but even so no incriminated animal was discovered. The total number of guinea-pig inoculations was 106 of which 11 were positive and 95 negative.

The three farms from which milk yielding the *Brucella Abortus* was reported were also visited with a positive result at one. Action was taken by the veterinary surgeon.

Enquiries were made by the officers of the sanitary districts from which the remaining thirteen milks were supplied : special inspections were made and samples of milk were submitted for bacterial counts.

### *Bacterial Counts*

The total number of samples submitted for examination at the Department of Agriculture of Bristol University was 182, 58 more than in 1931. The reports vary greatly and in 1932 more than one-quarter of the milks yielded total counts of over one million and in 40 per cent. the *bacillus coli* was found in so small a quantity as 1/1000 c.c. This sampling is done by the Sanitary Inspectors and it would appear that appreciation of the opportunity is increasing. As a sequel of an unsatisfactory report the farmer is given an opportunity of consulting the agricultural Organiser of the Education Committee but advantage of this is not taken as yet at all generally.

Dr. Rhind's notes on the matter probably apply generally over the whole County : they read " Generally a fair standard of cleanliness is maintained, but I am afraid that until a legal standard is laid down, the ' backsliders ' will not come into line. Several samples were examined during the year for bacterial count. These ranged from 170 to 1,632,000 per c.c., both samples being taken in July : the former kept for 71 hours and the latter for 48 hours. The farm from which the 170 per c.c. count came invariably gives a count below 200 per c.c. and this is not a model farm with expensive buildings and large staff, but an ordinary small farm worked by the owner and one man, so that if it is possible to have milk of this standard of cleanliness from one farm, it should be possible to have it from all. . . . This attention has conduced to a better understanding between ourselves and the milk sellers and a general improvement resulted. The County Dairy Instructress kindly came to a farm at Charlton and gave an educational demonstration : the interest shown was very encouraging as no less than thirty representatives of the industry attended from the surrounding area." She would gladly give similar demonstrations in other parts of the County on request.

## SURVEY OF DAIRY CATTLE.

For the past six years all the milch cattle in the County have been surveyed twice yearly : the number thus passing under review varied from 43,890 in the first survey of 1931-2, to 53,623 in the second in 1927-28. The proportion detected to have tuberculosis has ranged from 2.7 per 1000 (8th survey) to 5.5 (1st survey) ; the proportions in the two surveys of 1932-3 were 4.5 and 2.9 respectively. The affected animals are slaughtered and the known possible producers of tubercle infected milk are removed. It would be unduly optimistic, however, to anticipate that by such surveys our herds could ever be rendered tubercle free : even by the more complete examination of the human frame it is impossible to detect by clinical examination disease due to tuberculosis in its early stages, and in cattle it must be even more difficult. On the other hand, the attention thus directed to the physical state of the cattle must tend towards improved condition of dairy farms and production of milk, and, in time, this with encouragement from other directions should result in a better quality of the milk produced in the County.

## MENTAL DEFICIENCY.

In this area the duties with respect to mental deficiency are shared between the Education Committees of the County, City and Cheltenham M.B. and the Joint Committee of the County Council and Gloucester Corporation. The former committees deal primarily with children between the ages of 7 and 16 years, referring those unsuitable for instruction in a special school to the Joint Committee.

The number of persons on the registers of the County Education Committee and of the Joint Committee at the end of 1932 was 1292, 101 more than in 1931. The numbers of new cases coming under notice were 57 from schools, 57 from Public Assistance records, 14 from nurses and 40 from other sources—a total of 168. 52 persons left the County and 23 died. In addition to the above there are 140 children, regarded as dull and backward in the schools, under observation : 153 further children formerly so regarded are now classified as normal.

The distribution of the 1292 persons now on the register is :—

				<i>Males</i>	<i>Females</i>	<i>Total.</i>
<b>JOINT COMMITTEE.</b>						
In Institutions	...	...	...	99	109	208
on licence	...	...	...	6	9	15
Under Guardianship	...	...	...	—	1	1
" Visitation	...	...	...	110	111	221
In Voluntary Homes	...	...	...	7	5	12
<b>UNDER PUBLIC ASSISTANCE COMMITTEE.</b>						
In Mental Hospitals	...	...	...	41	41	82
In P.A. Institutions	...	...	...	75	146	221
At Home	...	...	...	30	58	88
<b>CLASSIFIED CASES.</b>						
No special action	...	...	...	15	15	30
Children becoming 16	...	...	...	44	27	71
Not yet classified	...	...	...	81	101	182
				—	—	—
				508	623	1131
<b>EDUCATION COMMITTEE.</b>						
Classified...	...	...	...	73	40	113
Unclassified children awaiting full examination	...	...	...	24	24	48
				—	—	—
				605	687	1,292

Of the 223 persons in various Institutions under Orders, 15 were out on licence at the end of the year. The distribution of the remaining 208 is :

Adcote Certified Institution	...	...	...	...	...	1
Barkingside Village Home	...	...	...	...	...	1
Brentby Colony	...	...	...	...	...	39
Cirencester P.A. Institution	...	...	...	...	...	28
Eagle House, Mitcham	...	...	...	...	...	3
Rampton State Institution	...	...	...	...	...	18
Royal Earlswood Institution	...	...	...	...	...	3
Royal Fort Home, Bristol	...	...	...	...	...	1
St. Mary's Home, Painswick	...	...	...	...	...	3
St. Theresa's Home, Lewisham	...	...	...	...	...	1
Sandlebridge Certified Institution	...	...	...	...	...	2
Stapleton P.A. Institution	...	...	...	...	...	1
Stoke Park Colony	...	...	...	...	...	96
Stow-on-the-Wold P.A. Institution	...	...	...	...	...	6
Walsham How Home	...	...	...	...	...	1
Winchcombe P.A. Institution	...	...	...	...	...	4
						—
						208
						—

221 cases are visited in the houses by the eight County Health Superintendents with the assistance of the District Nurses, some 136 in number. 20 children and young persons are receiving occupational training in their homes from 4 part-time teachers : some of them are doing very good work and are encouraged by the sale of their products by the teachers.

As will be seen from the above table, the principal Institutions used by the Joint Committee are Stoke Park Colony and Bretry Colony. During the year negotiations were in progress for increasing the numbers of beds available for this County at both Colonies ; when the draft agreements are completed the Committee will have the call on 300 places at Stoke Park Colony and 54 at Bretry. With this accommodation it will be possible to make suitable provision for the majority of the cases now in Public Assistance Institutions.

### REGISTRATION OF BIRTHS, DEATHS AND MARRIAGES.

No change has been made in the arrangements and as and when registration officers retire, temporary interim appointments are made, pending the proposed scheme for the revision of the arrangements throughout the County. The Scheme will be considered further when the division of the County under Section 46 of the Local Government Act has been settled finally.

### VACCINATION.

The summary of the records of the vaccination officers for the past 2 years is :

#### RETURNS by 25 Vaccination Officers on Births registered.

	1930	1931
No. of Births	...     ...	4812     4731
No. of Vaccinations	...     ...	748     756
No. of insusceptibles	...     ...	10     9
Conscientious objections	...     3,407	3,391
Died unvaccinated	...     ...	186     191
	—	—
	4,351	4,347
Postponement	...     ...	51     66
Removals	...     ...	63     63
Untraced	...     ...	96     84
	—	—
	210	213
	4,561	4,560
Not yet accounted for		251     171

The small proportion of the population in the County protected from smallpox by vaccination is evidenced not only by the above figures but by the fact that in the last twenty-three years the percentage of children so protected at the time of their admission to Elementary Schools in the County has fallen from about 70 per cent. to about 25 per cent. With the object of helping to remove some of the objections to vaccination, two suggestions have been made : one is that the nominal compulsion shall be removed and the second is that persons shall be able to be vaccinated, at the public expense, by their usual doctor instead of having to make appointments with a special public vaccinator.

### COST OF PUBLIC HEALTH SERVICES.

From time to time observations are made of the costly character of Health Services but statements of this kind are made not infrequently without full knowledge of the facts. One difficulty in estimating what is the cost is evidenced in the report of the Committee on Local Expenditure appointed by the Chancellor of the Exchequer. They give the figure for 1929-30 for the Country as a whole as 42.7 million pounds : the amount in Sir George Newman's report to the Minister of Health appears as 29.7 million pounds. The difference is due to the inclusion by Sir George Newman of items to the amount of 27.8 million pounds, not given by the Committee, and vice versa an amount of 13 million included by the Committee and not by Sir George Newman. The figure of the Committee covers mental hospitals, parks and open spaces, baths, etc., public conveniences and blind welfare. The extra items included by Sir George Newman are housing, poor law medical services, school medical services, and water supply.

Another difficulty is instanced by the fact that in this County the special school for children with tuberculosis is in the Institution for such persons and the expenditure appears under that heading. In another area, it might be run by the Education Committee, and there would appear under Educational expenditure.

But, as comparable statements as possible have been prepared for this County and the result is as follows :

COST PER HEAD OF THE POPULATION 1929-30											England & Wales		Gloucestershire				
										£	s.	d.	£	s.	d.		
										£	s.	d.	£	s.	d.		
Education	...	...	...	...	...	2	0	3		1	11	2					
Highways	...	...	...	...	...	1	4	5		1	7	3					
Public Health	...	...	...	...	...	1	1	7				4	1				
Public Assistance	...	...	...	...	...		15	10				12	10				
Police	...	...	...	...	...		10	7				8	5				
									£	5	12	8		£	4	3	9

Under the Public Health expenditure for Gloucestershire, there is no item for such matters as Isolation Hospitals which are district matters as distinct from County.

A more detailed comparable statement of public health expenditure is :—

COST PER HEAD OF THE POPULATION IN PENCE.  
1929-30.

		England & Wales	Gloucestershire
School Medical Service	...	22.4	18.5*
Tuberculosis	...	19.4	17.6
Maternity & Child Welfare	...	12.1	8.5
Salaries & Expenses	...	9.1	1.2†
Mental Deficiency	...	8.5	5.8
Venereal Disease	...	2.4	1.4
Blind	...	2.4	.9
Vaccination	...	1.2	.6
		77.5	54.5

\* This figure includes the cost of the special school at Standish House, so far as it can be ascertained, and that amount has been deducted from Tuberculosis.

† Certain salaries, such as those of District Medical Officers of Health are not included here.

An important factor not taken into account in such financial statements is the value of the services rendered. In the summer of 1932, however, the survey of the medical services of the Council under the Local Government Act, 1929 was made by officials of the Ministry of Health and extended over six weeks. In the report received in June 1933, it is said that "the Minister is advised that, "so far as can be judged from a general survey, the Council are "maintaining a reasonable standard of efficiency and progress in the "discharge of their functions relating to public health. He is glad "to learn of the close co-operation maintained between the medical "services of the County Council and the voluntary institutions and "the general body of medical practitioners in the County, and he has "observed with interest and appreciation the continuing develop- "ment of the "Scheme for the Extension of Medical Services," in "which it appears that co-operation of this kind has been achieved "in a high degree and with valuable results. The Minister also "notes with satisfaction the progress made in the Maternity and "Child Welfare service, as exemplified in the development of ante- "natal clinics, the provision of dental services, the establishment of

"additional Infant Welfare Centres and the supervision of the pre-school child. The various possibilities of meeting an increasing demand for lying-in accommodation will no doubt receive the consideration of the Council."

Observations are then made on certain matters, more particularly the aims of the Act with respect to Poor Law medical services and certain details in respect of venereal diseases, examination of foods and drugs, tubercular cattle and help for the blind.

### **LOCAL GOVERNMENT ACT, 1929 PUBLIC ASSISTANCE**

In the course of the survey of the Medical Services made on behalf of the Ministry of Health in the summer of 1932, Dr. Alan Parsons and Miss Quinlan visited the Public Assistance Institutions in the County, more particularly with reference to the provisions for the care of the sick.

In the Administrative Scheme of the County Council it is proposed to transfer certain functions to other Committees and the matter will have consideration on the report of the Ministry of Health as a result of the above survey.

---

1932.

TABLE I.—RATES, ETC.

DISTRICTS.	Estimated Population.	BIRTHS.		DEATHS.		
		Total.	Rate	Total.	Rate.	Under Total
<b>URBAN :</b>						
Awre	1,027	18	17.5	15	14.6	1
Charlton Kings	4,648	47	10.1	62	13.3	1
Cheltenham	51,160	601	11.6	736	14.1	42
Cirencester	7,288	106	14.6	106	14.6	3
Coleford	2,828	54	19.1	45	15.9	5
Kingswood	13,240	168	12.7	158	11.9	15
Mangotsfield	11,380	160	14.1	133	11.8	7
Nailsworth	3,194	39	12.2	43	13.5	3
Newnham	1,108	12	10.8	13	11.7	—
Stow-on-the-Wold	1,295	12	9.3	16	12.4	—
Stroud	8,360	116	13.9	123	14.7	2
Tetbury	2,200	31	14.1	22	10.0	1
Tewkesbury	4,378	55	12.6	62	14.2	4
Westbury-on-Severn	1,694	25	14.7	28	16.5	3
Total U.D.	113,800	1,444	12.7	1562	13.7	87
						60
<b>RURAL :</b>						
Campden	8,236	118	14.3	128	15.6	11
Cheltenham	5,696	61	10.7	60	10.5	—
Chipping Sodbury	25,120	385	15.3	317	12.6	15
Cirencester	12,070	173	14.3	169	14.0	6
Dursley	13,360	199	14.9	163	12.2	8
East Dean	19,800	368	18.6	289	14.6	20
Faringdon (part)	998	10	10.0	18	18.0	—
Gloucester	15,050	174	11.6	171	11.4	8
Lydney	10,570	152	14.4	98	9.3	7
Newent	7,357	112	15.2	104	14.1	5
Northleach	7,103	111	15.6	83	11.7	4
Stow-on-the-Wold	6,147	79	12.9	86	14.0	5
Stroud	27,290	354	13.1	385	14.2	20
Tetbury	3,815	53	13.9	31	8.1	3
Tewkesbury (part)	4,249	54	12.7	72	17.0	1
Thornbury	19,630	300	15.3	236	12.0	14
Wormley	8,961	140	15.6	78	8.7	5
West Dean	14,280	233	16.3	156	10.9	13
Wheatenhurst	6,120	104	17.0	73	11.9	4
Winchcombe (part)	8,248	108	13.1	99	12.0	3
Total R.D.	224,100	3,288	14.7	2,816	12.6	152
Administrative County	337,900	4,732	14.0	4,378	13.0	239
						50.5

TABLE II.  
NOTIFIABLE INFECTIOUS DISEASES.—1932.

TABLE III. 1932.  
L.G.B. TABLE iii CAUSES OF AND AGES AT DEATH.

